



THE UNIVERSITY *of* EDINBURGH

This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.

Place and Competitive Advantage:
A Qualitative Study of Financial Services in
Edinburgh and Glasgow

Philip Riddle

Degree of Doctor of Philosophy

The University of Edinburgh

2018

Declaration of Own Work

I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where stated otherwise by reference or acknowledgment, the work presented is entirely my own.

..... (P. K. Riddle)

.....(Date)

Acknowledgements

Creating this thesis has been a most stimulating and challenging exercise. I should particularly like to thank Dr. Ben Spigel for guiding me through the thickets of theory and PhD form and function to this point and Professor Brad MacKay for his wise council along the way. Many thanks also to my wife Kate for her long-suffering support on the home front, to Dr Neil Lee and Professor Sarah Cooper for their most constructive suggestions to finalise this thesis, to Professor Chris Carr for helping me on to the PhD programme in the first place and to all the participants in my research who gave so readily and eloquently of their time and invaluable knowledge. Last but not least, I owe a debt to the multicultural, multinational, multi-talented motley crew who are my PhD colleagues and who have made this such a rich and rewarding experience.

Abstract

This research examines the relationship between places and firms and how this contributes to competitive advantage. This is a vitally important topic at present, as businesses are adjusting to the dislocations of Brexit, trade wars, nationalism and other reactions to globalisation. Firms need a place strategy more than ever. How should resources be located in relation to markets, suppliers, skilled workers, laws, incentives, infrastructure, quality of life and the myriad other factors affecting business? Global connectivity presents so many options but also so many threats.

Despite its importance, this is a subject that is relatively poorly served by existing literature and theory. A review of strategic management work relating to competitive advantage, including reflections on Chandler, Ansoff, Porter, Barney, Mintzberg, and many other authors, reveals an emphasis on management and organisation but a virtual blindness to the role of place. A review of economic geography literature related to competitive advantage, including consideration of work from Marshall to Maskell, Storper, Sassen, Glaeser, Florida and many others, shows an emphasis on place but a relative neglect, with only a few significant exceptions, for the view from the firm and the role of individuality in organisation and management. The two disciplines show a striking complementarity in their omissions.

This interdisciplinary study draws on the wide range of existing material to build a new and comprehensive model of the place-firm relationship (the PFR) that brings convergence to the thinking around competitive advantage. This model is then tested and adjusted through empirical research leading to recommendations for firm strategy, government policy, academic theory and future research.

The empirical study is based on the most important business sector in the UK in terms of size, growth and impact, namely financial services, and is set in the top two centres of activity in the UK for this sector outside London, namely Edinburgh and Glasgow. At the heart of the work is a series of 29 semi-structured, in-depth interviews with senior executives in these cities investigating how firms see the contribution of place to their competitive advantage, a necessarily qualitative methodology to unravel the complexity and contradictions inherent in the existing theory. The interviews have been transcribed and coded and analysis of the feedback has been used to both refine the new model and to derive insights about how it works in practice.

The results of the application of the model show that the PFR is highly complex but also that it can be rigorously assessed and the key factors contributing to competitive advantage can be identified and prioritised. These factors can be grouped under the main themes of the *ease of doing business, talent, quality of life, local networks* and *legacy*. It is clear that every business enjoys a unique PFR but that the individual organisational profiles can be aggregated in line with the main themes to show agglomeration and cluster effects around places, industry sectors, types of business and other groupings. In the case of the financial services businesses tested here, the availability of talent stands out as the most important contribution to competitive advantage firms receive from places, but this is closely linked to other factors in a web of connections. Also evident is the pragmatic co-existence of competition and collaboration in firm strategies and practice and the emergence of different but overlapping cluster types, particularly one underpinned by legacy in Edinburgh and the other underpinned by government intervention in Glasgow.

This research gives business managers a tool and methodology with which to assess and compare how place contributes to their competitive advantage. It thus gives an added vital dimension to most strategic decisions and particularly to considerations about relocation, expansion, off-shoring, and geographical dispersal and diversification. The agility necessary for businesses to respond to the current turbulent political and economic environment must extend to managing place and place-firm relationships in the more systematic way proposed in this work in order to maintain and extend competitive advantage. This model can also help development agencies and national and local government to interpret the competitive advantages of places as seen by firms and to make comparisons with other places. It can give an informed basis for discussion with businesses and point to where improvements can be made in line with the place objectives and overall development plans. The new model gives a common framework for different parties to reconcile their objectives to mutual benefit.

Last but not least, the research presents academics with possibilities for more interdisciplinary work to address gaps in theory about one of the most pressing issues of the day. The model opens the door to new research opportunities to test its applicability in different combinations of places, businesses and industry sectors, for different types of agglomeration and cluster formation. This is an opportunity for the academic research community to furnish the objective, sound and informed view necessary to support potentially controversial decision making in these uncertain times.

Contents

Declaration of Own Work	ii
Acknowledgements.....	iii
Abstract.....	iv
Contents.....	vi
Glossary of Acronyms and Abbreviations	viii
List of Figures	x
List of Tables	xi
1 Introduction	1
1.1 The Place-Firm Relationship (PFR)	1
1.2 Structure of the Research	3
1.3 Context: Edinburgh and Glasgow.....	6
1.4 Context: Financial Services in Edinburgh and Glasgow	9
1.5 Clarifications	11
1.6 The Research Questions.....	12
1.7 The Contribution	12
2 Theory and Literature	14
2.1 Place and Strategic Management	14
2.2 The Firm and Economic Geography	33
2.3 Porter, Clusters and Competitive Advantage	43
2.4 Knowledge-Based City Growth	57
2.5 Clusters and Firms.....	63
2.6 Theory, Literature and the Framework for Analysis	65
3 Methodology.....	71
3.1 The Methodological Approach.....	71
3.2 Study Population Selection	73
3.3 The Framework for Analysis and the PFR Model	81
3.4 Qualitative Data Collection	83
3.5 Sentiment Categorisation	91
3.6 Visualisation and Interpretation	96
3.7 Methodology Summary and Conclusions	100
4 The Financial Services Industry in Edinburgh and Glasgow	101
4.1 Beginnings in Edinburgh	101
4.2 The Rise of Glasgow	102

4.3	Growth and Innovation	103
4.4	Evolution and Resilience	105
4.5	Financial Services Today	107
4.6	Conclusion.....	111
5	Findings, Analysis and Discussion	113
5.1	Constructing the Framework for Analysis.....	113
5.2	The New Model.....	131
5.3	Balancing Complexity.....	134
5.4	Talent	138
5.5	Networks, Competition and Collaboration	146
5.6	Edinburgh and Glasgow	150
5.7	Key Findings	164
5.8	The Future.....	165
6	Conclusions	167
6.1	Approach.....	167
6.2	Theory and Literature	167
6.3	Methodology.....	171
6.4	Analysis 1: Findings from Building the New Model	172
6.5	Analysis 2: Findings from Applying the New Model	174
6.6	The Research Questions.....	177
6.7	Contribution and Implications	178
6.8	Summary of Conclusions.....	184
6.9	Next Steps and Further Research	185
	References	187
	Appendix 1 Example Organisational Profile.....	201
	Appendix 2 Interview Framework Skeleton.....	204
	Appendix 3 NVivo Node Hierarchy	205

Glossary of Acronyms and Abbreviations

ASQ: Administrative Science Quarterly

ATM: Automated Teller Machine

BoS: The Bank of Scotland

Brexit: the political process of the United Kingdom exiting the European Union

CBI: Confederation of British Industry

FCA: Financial Conduct Authority

FDI: Foreign Direct Investment

FISAB: The Financial Services Advisory Board

GEL: Glasgow Economic Leadership Group

GM: General Motors

GPS: Global Positioning System

GVA: Gross Value Added

HBOS: Halifax Bank of Scotland

HBR: Harvard Business Review

HBS: Harvard Business School

ICAS: Institute of Chartered Accountants of Scotland

IFSD: International Financial Services District

IP: Intellectual Property

LBG: Lloyds Bank Group

MBA: Master of Business Administration

MIT: Massachusetts Institute of Technology

MNE: Multinational Enterprise

NRS: National Records of Scotland

NUTS3: The European Commission regional classification Nomenclature of Territorial Units for Statistics, level 3 (smallest)

OLI: Ownership, Location and Internalization – as applied by Dunning in his “eclectic” approach to FDI.

ONS: Office for National Statistics

PFR: The Place-Firm Relationship

PESTEL: Political, Economic, Social, Technical, Environmental, Legal – as applied to factors affecting the business environment.

QDAS: Qualitative Data Analysis Software

REF: Research Excellence Framework

RBS: The Royal Bank of Scotland

SDI: Scottish Development International

SDS: Skills Development Scotland

SE: Scottish Enterprise

SFE: Scottish Financial Enterprise

STEM: Science, Technology, Engineering, Mathematics

SWOT: Strengths, Weaknesses, Opportunities, Threats – as applied to the firm's competitive environment.

UK: United Kingdom

US: United States of America

List of Figures

Figure 2-1 Porter's diamond; the national model.....	44
Figure 2-2 Porter's five forces the industry model	46
Figure 3-1 Research process overview.....	71
Figure 3-2 UK GVA per capita, 2013, at NUTS3.....	74
Figure 3-3 UK GVA by industry group, actual 2012 v change 1997-2012	75
Figure 3-4 UK GVA by Finance and Insurance Activities, top areas excl. London, actual 2014 v change 1997-2014.....	76
Figure 3-5 NVivo coding screenshot, sentiment categorisation	95
Figure 3-6 Example retail bank PFR, proportions of total score, level-1	97
Figure 3-7 All responses PFR, proportions of total score, level-1.....	97
Figure 3-8 Edinburgh and Glasgow PFR, proportions of total score, level-1	98
Figure 3-9 Retail banks PFR, proportions of total score by time in city, level-1	98
Figure 3-10 BSOs and firms, proportions of quality of life scores, level-2.....	99
Figure 4-1 Timeline of Edinburgh and Glasgow financial institutions	106
Figure 4-2 Finance and insurance activities GVA growth, Edinburgh and Glasgow	107
Figure 5-1 PFR factor tree diagram	130
Figure 5-2 The PFR model	132
Figure 5-3 The Chemistry of the PFR	133
Figure 5-4 The Cluster Model.....	134
Figure 5-5 All responses PFR, proportions of total scores, level-1 & level-2	135
Figure 5-6 Firms and BSOs PFR, proportions of total scores, level-1.....	140
Figure 5-7 Firms and BSOs PFR, proportions of talent scores, level-2	140
Figure 5-8 Proportions of local networking scores, level-2	146
Figure 5-9 Edinburgh and Glasgow firms, proportion of total scores, level-1.....	150
Figure 5-10 Edinburgh and Glasgow firms, proportions of talent scores, level-2	151
Figure 5-11 Edinburgh firms, proportion of legacy scores, level-2.....	152
Figure 5-12 Edinburgh and Glasgow per capita GVA, all industries	155
Figure 5-13 Firms HQ and non HQ proportions of total scores, level-1	155
Figure 5-14 Edinburgh and Glasgow proportions of local network scores, level-2	157
Figure 5-15 Edinburgh and Glasgow proportions of ease of doing business scores, level-2	158
Figure 5-16 Edinburgh and Glasgow proportions of quality of life scores, level-2.....	159

List of Tables

Table 2-1 Comparing Porter's five forces and dynamic diamond	46
Table 2-2 Criticisms of Porter's diamond cluster theory	55
Table 2-3 Summary of overlaps and omissions from Porter	57
Table 2-4 Top 10 US companies, 1967 v 2017	58
Table 3-1 Organisational view profile	80
Table 3-2 Participant profile	81
Table 3-3 The five themes of the PFR Framework.....	82
Table 3-4 NVivo 11 source case attributes	90
Table 3-5 Sentiment categorisation.....	92
Table 3-6 Inter Rater Reliability Test.....	95
Table 4-1 Edinburgh and Glasgow financial services employment and contribution, 2017	108
Table 4-2 Edinburgh and Glasgow insurance companies	109
Table 4-3 Investment management businesses	110
Table 5-1 Ease of doing business factors	115
Table 5-2 Talent factors	118
Table 5-3 Quality of life factors.....	121
Table 5-4 Local network factors.....	124
Table 5-5 Legacy factors	127
Table 5-6 Talent, education weighted scores, level-3	141
Table 5-7 Talent, quality weighted scores, level 3.....	141
Table 5-8 Edinburgh and Glasgow cluster models.....	161
Table 5-9 Key findings from creating the framework for analysis and the new model.....	164
Table 5-10 Key findings from applying the new model	164
Table 6-1 What is surprising in the model?	174
Table 6-2 What is surprising in the application of the model?	177
Table 6-3 Summary of Conclusions.....	184

1 Introduction

1.1 The Place-Firm Relationship (PFR)

The place-firm relationship (PFR) is important but relatively neglected in both academic consideration and business practice. The PFR determines a firm's access to talent, technology and networks. It governs the natural, political, social, cultural, legal and economic environments in which the firm works. It dictates the availability of transport, telecommunications, general infrastructure and support services; it defines the firm's proximity to potential markets, its costs of operation and the quality of life its employees can enjoy. Yet as this thesis will show, there are significant gaps in the literature on this subject and a rather incomplete appreciation of its centrality in business practice.

It is particularly important to consider this relationship in the light of recent developments affecting where and how firms do business. Throughout the world the established model of capitalism is being questioned. The shortcomings of the system revealed in the 2007 – 08 financial crisis, and the growing awareness of inequality across and within countries have led to dissatisfaction and disillusionment with post war liberal economic policies. This has generated increasing interest in nationalism and protectionism and the attendant restrictions on trade and the free movement of people and goods. Together with an eastwards shift in economic growth based on alternative economic models this is forcing firms to re-evaluate their situations and the geographical distribution of their resources, supply chains and market access. The PFR is a big and broad subject. It is particularly important for head offices, but it also affects branch offices, support services, production operations and subsidiaries both nationally and internationally. It is a recurring consideration whenever any company of any size is thinking strategically about its physical presence. It is pivotal in decisions about scaling up or scaling back, about integrating horizontally or vertically, about siting start-ups and spin-offs and about outsourcing and off-shoring. Furthermore, it is not just about the movement of firms and the opening of new sites or the closing of redundant ones. It is also about resource allocation within firms, within the existing spread of operations and locations. A firm can be in many places but shift the weight of its activities depending on changing circumstances at any point in time without completely leaving anywhere. This gives diversification opportunities to help to spread risks in unpredictable times. Knowledge dependent firms, like those in financial services, do this with relative ease. Examples can be seen in recent adjustments by international banks like Morgan

Stanley and HSBC in response to Brexit, the United Kingdom's plans to leave the European Union (Goodley, 2017; Knight & Wójcik, 2017).

This is not just crucial for firms. The PFR is also key to a place's prosperity and, to a large extent, the employment prospects, quality of life, infrastructure and amenities the place can offer. It is the interface at the heart of a place's growth and survival. This mutually beneficial relationship between places and firms can be seen in Silicon Valley and Bangalore based on high technology, in London and Zurich based on finance, in Dubai based on retailing, in Milan based on fashion and design, in Bangkok and Paris based on tourism, in fact in most economically thriving places around the world. Paradoxically, globalisation and the greater freedom for firms to locate anywhere has actually increased the concentration of resources and economic activity in specific places and the need for both firms and places to continually re-assess their positioning in relation to their respective competitors. The PFR is becoming ever more important (Florida, 2012; Glaeser, 2011).

The PFR is important in decisions about law and governance, about trade relations and capital project development. It influences politics, social well-being and culture and it can be influenced by government policies, expenditure and incentive programmes. This is usually a long-term relationship. Once a decision has been made, most firms are reluctant to incur the financial and human costs of moving. Places, similarly, want to give their citizens stability and continuity. Symbiotic and pragmatic ties form between firms and places that can be good and bad. A strong PFR can support competitive advantage for long periods, although it can also lead to "lock-in" and a resistance to change that produces decline. The PFR is central to the competitive advantage of both firms and places and to their economic prospects.

For all these reasons we need to have a better understanding of the PFR and regular assessments of how it is working for both firms and places. It is a continually changing relationship. Firms and places do not exist in splendid isolation but in a fluid working environment buffeted by global and local developments. Managers in both the private and public sectors must be continually assessing and optimising the relationship and, to do this, they must understand how it works. This presents challenges for both academics and practitioners. The current understanding of the PFR is incomplete. Scholars need to look beyond their immediate subject areas at an inter-disciplinary approach to embrace the full range of forces at work in the PFR. Managers in firms, in business support organisations (BSOs) and in universities also need to look beyond their immediate responsibilities to compare and align their roles in relation to maximising the benefits from the continually

changing PFRs in which they operate. It is a multifaceted relationship. Firms can adapt to get the best out of places and places can adapt to get the best out of firms. This research will get to the heart of this huge subject, bridging the gaps in the academic literature and developing a better understanding of the phenomenon so businesses and those involved in place development can make better decisions for their mutual benefit.

1.2 Structure of the Research

This study starts with a review of relevant literature from strategic management, economic geography, cluster theory and city growth in terms of what it does and, mostly, does not say in relation to firms' views about place. A wide range of strategic management literature from Taylor (1911), Drucker (1946, 1955) and Sloan (1964) through to Chandler (1962), Ansoff (1965), Mintzberg (1987, 1994), Barney (1991), Prahalad and Hamel (1990), Senge (1992), Collins & Porras (2005) and many others has been considered. These works give powerful insights and show the evolution of strategic management thinking in relation to creating competitive advantage, but they also share a significant deficiency in the almost complete absence of reference to the role of place in theories of how firms operate, develop their strategies and compete.

Economic geography clearly has a common interest with strategic management in understanding competitive advantage, though with an emphasis on how this is achieved in places rather than individual firms. A lot of the work in this area examines the PFR in particular, from Marshall (1st ed. 1890) and Weber (1929) through Hamilton (1967) and Chorley & Haggett (1967) to Saxenian (1994), Storper (1997), Markusen (1996), Malmberg & Maskell (2002) and others. This is quite the obverse of strategic management theory with everything about place but with less emphasis on the role of the individual firm and of human agency. Where strategic management is place neutral, all places are effectively the same, economic geography is more firm neutral, firms are often treated as effectively all the same. There is a tendency for them to be seen as black boxes, all acting simultaneously in similar, rational and predictable ways with less examination inside the box at differences, for example, in strategy, management capability or internal organisation.

There appears to be an opportunity for complementarity here, with economic geography filling the void of strategic management's place blindness and vice versa, and there have been attempts to exploit this. For example, Michael Porter has been influential for decades through his writing on competitive advantage in both the corporate (1979, 1980, 1985) and place (1998, 2000) contexts and his studies developing cluster theory have offered an

opportunity to bring the two disciplines together in this area. Despite contributing significantly to both sides of the debate, however, he has failed to reconcile the positions with a full and accurate picture to explain the PFR.

More recently, the focus on city growth has opened up another possibility for convergence between the thinking in economic geography and that in strategic management. Both disciplines recognise the influence of trends towards globalisation and knowledge based economic activity and writers like Glaeser (2011), Florida (2012, 2009, 2002), Sassen (2012) and Storper (2013) have convincingly shown how these trends have come together in the place-based view of booming global cities. The theory does not get under the skin of firms to analyse why and how they do what they do however. Firms here are still largely anonymous, passive players with their destinies shaped by urban and regional forces. Similarly, those writing about these recent trends in terms of strategic management have remained quite introverted, resolute in their focus on the internal workings of the firm, on management and organisation, on the firm versus the world and not on how firms can shape and be shaped by place factors. There is little mention of the phenomenon of city growth at all despite significant contributions to strategies for knowledge creation, sharing and management within organisations, for example Dalkir (2017) and Becerra-Fernandez & Sabherwal (2015).

The wide range of literature mentioned above is reviewed in Chapter 2 following. None of this offers a full picture of how the PFR works but all of it has something to contribute. An empirical study has, therefore, been built on this incomplete base taking input from those directly involved as practitioners within PFRs. Chapter 3 describes the methodology behind this study. It explains the use of quantitative data to identify successful places and successful business sectors within which to position the research enquiry and then the collection of qualitative data, primarily through semi-structured interviews, to investigate the role place plays in creating competitive advantage through the PFR. It goes on to outline the rationale behind my choice of financial services in Edinburgh and Glasgow as the test bed for the study and how I then used publicly available material and word of mouth referrals, purposive and snowball sampling, to make a balanced selection of representative firms, BSOs and universities to approach for input. As a guide to the interviewing process and to the subsequent coding of transcripts I constructed a completely new framework for analysis of the PFR. This is the central pillar of this work, built around the literature as described coupled with input from interviews and meetings in an iterative process between theory and data. The framework that is presented here embraces five main themes, *Ease of Doing Business*, *Talent*, *Quality of Life*, *Local Networks* and *Legacy*, and has been embedded in qualitative

data analysis software (QDAS) breaking these themes down into a further 24 level-2 nodes and 11 level 3-nodes. Appendix 3 to this thesis gives the full framework structure. Out of a total of 35 extended meetings and interviews I coded references representing 29 organisational views in this structure. I used the NVivo Pro version 11 software to code and organise my data. This proved to be very effective in allocating the material across the themes and sub nodes but deficient in reflecting whether the comments were positive or negative and how strongly they were expressed. I, therefore, added a sentiment categorisation to the basic framework which scored all recorded references on a scale from *important and positive* to *seriously deficient* in a manner that highlighted the most significant factors seen to be behind the PFR's role in achieving competitive advantage. These weighed scores expressed as proportions of the total score were then projected on to radar charts for every organisational view and for various aggregations of these to produce factor maps to facilitate the visualisation and comparisons of the data as described, with examples. This methodology builds on best practice in several areas, for example, interviewing techniques and qualitative data gathering and interpretation, but in its combination of different elements it represents a new and bespoke approach, an approach that has been particularly effective in this case in producing rich data in a manageable format.

The next two sections (1.3 and 1.4) of this Introduction set the all-important context for the empirical study with background information on Edinburgh and Glasgow and the evolution of financial services in the two cities. Chapter 4 gives further details on the origins and current profile of financial services in the cities with a view to helping with the interpretation of the feedback from the interviews. It covers the diversity of financial services businesses, past and present, and milestones in their development. The differences between the two cities and across the different types of financial services, far less the significant differences across the firms themselves, conspire to suggest a complexity that renders thematic analysis and theorising a challenging process.

Chapter 5, however, deals with the findings, analysis and discussion of the data, from showing how the leads from existing literature can coalesce in a comprehensive framework for analysing the PFR, to how testing this framework with businesses enabled the creation of a model to represent the PFR and on to applying this model with the help of the factor maps described above showing how the new model can produce insights into PFR complexity. Some of the findings were predictable, but others were surprising. What emerges very clearly is not just the relative importance of the individual factors making up the PFR but their inter-relationships. Most respondents contributed to a greater or lesser degree on all the themes

and no one organisational view was exactly the same as another. The PFR is seen to be complex, but it can be mapped in a way in which it can be reviewed and aggregated to detect patterns and priorities, and these can be the bases for action by managers in both the private and public sectors.

Chapter 6 gives a brief recap of the research and its implications. It revisits the research questions set out later in this Introduction and highlights the contributions made in several areas by this study. There are significant contributions to theory, policy and practice relating both to the development of the new model and to the application of the model in the empirical study. The conclusions from the findings and the recommendations for actions for both private and public sector organisations to build on these are outlined as are the opportunities for further research. This is a first step in a new, inter-disciplinary approach on this subject and it has opened up myriad possibilities for further investigation.

1.3 Context: Edinburgh and Glasgow

The cities of Glasgow and Edinburgh lie less than 50 miles apart in the central belt of Scotland. Glasgow is the country's biggest city with a population of 621,020 (NRS, 2017) and Edinburgh is the second biggest and the national capital with a population of 513,210 (NRS, 2017). The city regions embrace 1.8 and 1.4 million people respectively, over 58% of the population of Scotland (ONS, 2015).

As explained in further detail in section 3.3 following, these cities were chosen for the empirical study in this research because they are home to the second and third largest concentrations of financial services activity in the United Kingdom, after London; financial services having been identified as the most dynamic sector in the country in recent times. The choice proved fortuitous as the cities exhibited quite different and distinctive place attributes affecting the PFR but under a common macroeconomic mantle. The ability to compare and contrast at the detailed, local level helped to reveal the complexity of the different PFRs.

Whilst this choice proved fortuitous the financial services firms chosen for this study were not selected because they are in Edinburgh and Glasgow but because they are in the second and third most important concentrations for the sector in the UK. By far the biggest concentration is in London but, for reasons of scale, complexity and comparability detailed further in section 3.3, the UK capital was not chosen for this research. The firms that were selected are, therefore, considered to be representative of not just this sector in the two cities or in Scotland but of the UK as a whole. This does not discount the possibility, of course,

that one of the best ways to achieve competitive advantage in financial services in the United Kingdom (outside London) is to be located in Scotland.

1.3.1 Edinburgh

The natural defensive attributes of the castle rock have made Edinburgh the longest continuously occupied site in Scotland and a centre of power for well over a thousand years. Royalty resided here - Saint Margaret, Queen to King Malcolm Canmore, died in Edinburgh castle in 1093; the future James VI of Scotland and I of England was born in the same building in 1566 - and Parliaments were held here, but the city did not become the undisputed capital of Scotland until the Scottish Reformation in the sixteenth century. The General Assembly of the Church of Scotland met in the city for the first time in 1567 and instigated new directions in law, where a more secular Scots law emerged centred on the Edinburgh based Court of Session, and in education, centred on the University of Edinburgh founded in 1583 (Fry, 2009). The three institutional pillars of the new Scotland representing religion, law and education were housed in the city and bolstered the presence of royalty and Parliament to consolidate Edinburgh's position as the home of Scottish government, a convergence of forces that has continued more or less to this day and has profoundly influenced the city's development and prosperity.

National pre-eminence and institutionally-based growth survived the removal of the king and his Court to London under the Union of the Crowns in 1603 and the similar removal of the Scottish Parliament under the Act of Union of 1707. In fact, the eighteenth century, especially after the 1745 Jacobite rebellion, saw Edinburgh attain international stature through its position at the heart of the Scottish Enlightenment. The city nurtured the thinking and debate amongst great luminaries of the time including David Hume (philosophy), Adam Smith (philosophy and economics), Joseph Black (medicine), James Hutton (geology) and Alexander Munro (anatomy) which, in turn, informed the new, rational approach to politics, culture, economics and science in the city, the country and the whole of western Europe (Fry, 2009; Buchan, 2003; Herman, 2001). Voltaire himself noted, "today it is from Scotland that we get rules of taste in all the arts, from epic poetry to gardening" (Buchan, 2003, p.2)..

The eighteenth century also saw the burgeoning of Edinburgh as a financial centre. Growing prosperity and the concentration of the powerful and the rich who had stayed in Edinburgh despite the shift of political power south gave the foundations for today's industry, with the Bank of Scotland established in 1695 and the Royal Bank of Scotland in 1727. This service sector grew and evolved to include insurance and investment management. This perhaps compensated for the fact that Edinburgh got little in the way of manufacturing from the

industrial revolution and the growth of British imperial trade compared to its near neighbour, Glasgow. The only other new industries to boom in the city in the period were publishing and brewing (Fry, 2009), perhaps appropriately for a city of intellect, liberal professions and the landed gentry.

The city has retained its leadership in government, religion, law, education and financial services through the nineteenth and twentieth centuries and into the twenty-first. Government presence and political leverage have actually increased, with a steady northwards transfer from London of administrative responsibilities after the second world war culminating in Scottish devolution and the return of a Scottish Parliament to the city in 1999. Successive waves of financial services industry development and the more recent growth of high-technology businesses have invigorated commercial life around the leading institutions despite setbacks around the financial crisis of 2008, including the effective collapse of Scotland's two main banks. Edinburgh remains modest in size for a major city, at around 500,000 people, but continues to thrive as a unique concentration of Scotland's core institutions. These have been buttressed by two major characteristics running through the life of the city. The first is the feeling of security and continuity that derives from Edinburgh's physical position, set around the imposing castle, and is reinforced by a long and successful history. The second is the importance of influential élites who have found a natural gathering place in the capital bringing together government, commerce, the law, religion and education. These characteristics continue to define the city, for better and for worse.

1.3.2 Glasgow

Glasgow is a relative newcomer to prominence, power and prosperity. Strategically placed at the lowest point down the Clyde at which the river could be bridged it held a feudal right to hold a weekly market from 1175 and was an educational centre before Edinburgh with the University of Glasgow, founded in 1451, being the fourth oldest in the English-speaking world (after Oxford, Cambridge and St. Andrews). The city prospered from the seventeenth century when Glasgow's position as the nearest city in western Europe to America opened up trade in tobacco, sugar and then cotton, but the dramatic growth that catapulted the city into being, and remaining, Scotland's biggest city, is rooted in the addition of manufacturing from the eighteenth century. The fortunate coincidence of a sheltered western port on the Clyde, surplus capital from trade, the incentive to add value to exports and the local availability of the raw materials fuelling the industrial revolution, iron ore and coal, put the city in an ideal position to benefit from the 1707 Union and Britain's global expansion (Fry, 2017; Devine, 2006).

Growth continued through the nineteenth century and the city saw a tenfold increase in population to over three-quarters of a million people by 1901 (Health, 2018), making it by far Scotland's most populous city and the dominant industrial and commercial centre. A textile industry based on imports of cotton and exports of clothing spawned an international chemicals industry focused on new manufacturing processes. In parallel, iron and steel production thrived, fed with raw materials from local mines, and this supported the construction of steamships to power the trade in raw materials, textiles and chemicals. By 1913, 23% of the world's ships were produced on the Clyde, with one launched every day, and the engineering expertise developing around the city's manufacturing base extended to factories supplying one third of the locomotives and rolling stock and most of the sewing machines in Britain (Fry, 2017). Financial services businesses were born and thrived in the city to meet the needs of industry and trade, for example, the Ship Bank founded in 1750 and the Thistle Bank founded in 1761 but, although some prominent institutions have survived to this day, the industry never gained the same foothold and prominence as it did in Edinburgh. The city's energies appear to have been diverted to other opportunities.

Glasgow has benefited from some of the best in Scottish commercial acumen and innovation to make it the nation's industrial power-house, but it has also seen greater volatility in its prosperity than Edinburgh, reflecting the vicissitudes of international trade and manufacturing competition. In the 1930s unemployment in the west of Scotland averaged more than 25% (Fry, 2017) and there was serious poverty in the city. Manufacturing in Glasgow and its hinterland moved from ships and locomotives to cars and consumer goods to computers and information technology, but the transitions were not smooth. This evolution is continuing with a shift from manufacturing to service industries and, like Edinburgh, the city's character continues to be influenced by two persistent but different themes, namely an openness to enterprise and an adaptability and commitment to skills development as a basis for personal and general economic success.

1.4 Context: Financial Services in Edinburgh and Glasgow

Financial services businesses represent an industry that is highly dependent on talent and modern communications; it is an industry that could be anywhere and is, already, almost everywhere. Yet there are long-standing concentrations of financial services businesses in Edinburgh and Glasgow. This is a classic example of both globalisation and localisation. These businesses are not, in the main, tied to local markets. Their customers are in the south of England, in Europe, in Australia, in the United States, in the Far East, all over the world. They

benefit from the flat world of relatively easy communications and travel, of open markets and mobility of labour. They also represent the marked tendency to concentrate economic activity in certain urban areas: however, these businesses represent 5.5% of Scotland's total GVA clustered in the two cities (ONS, 2016). They, thus, present excellent opportunities to investigate the complexity and the apparent ambiguities of place-firm relationships.

Some of these businesses date to the seventeenth and eighteenth centuries; many others have only been in the cities since the turn of this century. Some employ hundreds of people, others have tens of employees and some are head offices whilst others are branches of major multinationals. They constitute many different activities within the financial services industry, including commercial banking, specialist banking, investment management, insurance, wealth management, asset services, fintech and legal and accounting services. They represent history and modernity, resilience and innovation, a broad swathe of business experience.

Furthermore, these businesses are in the front line in facing the challenges that are changing the face of capitalism today. They are in a globally competitive industry, experiencing widespread technical change, increasing consolidation and increasing regulatory scrutiny, particularly arising from the residual effects of the financial crisis of 2007-08 and various scandals engulfing the industry. In Scotland there is a particular pressure from the recently heightened sense of nationalism and a continuing debate about independence. Overlying this there is Brexit and the on-going attempts by the United Kingdom to develop a new relationship with Europe.

These businesses are old and new, big and small. They sit in an industry that is immense in scale and growing world-wide. They are confronted by the growing nationalist and protectionist sentiments already mentioned, by fierce industry competition and consolidation, by game-changing technological innovation. In all these aspects they represent a microcosm of the opportunities and challenges facing companies throughout the United Kingdom and throughout the world. Coupled with the distinctive histories of the cities of Edinburgh and Glasgow themselves they, thus, represent excellent subjects to consider in the context of the PFR in today's world.

The more detailed story of the evolution of the financial services businesses in Edinburgh and Glasgow is picked up again in Chapter 4.

1.5 Clarifications

1.5.1 Place and location

Location and place are concepts that overlap and can cause confusion. In the context of this research I have considered *location* to be a very precise physical point, where the business is positioned as definable by GPS (Global Positioning System). *Place* is wider and includes not just the physical location but the environment; where the business is positioned in terms of the social, cultural, economic, legal, historical, political, institutional, infrastructural and other factors that distinctly affect the firm in its location (Coe, et al., 2007). This could be a city or a region or a city-region. This must include both macroeconomic factors that might come largely from outside the place and microeconomic factors that come largely from within because all affect a firm's decision making. My research has indicated that most firms, and people, have an idea of what these factors are even though they might have difficulty defining their place geographically far less agreeing exact, common boundaries for places amongst themselves. The sense of place is strong even if its boundaries are rather fluid. The focus here is on this wider and rather fluid view of place; not just where on the ground a firm will put its office or production plant and not just places as defined by administrative boundaries but on all the components of the environment in which it will be working. None of the interviewees had any difficulty with this. They all had a clear view of the concept of place in their particular context, though this may have been different from one to the other, and there was no questioning of definition or administrative boundaries.

1.5.2 Firms and managers

The basis for identifying the factors that influence the PFR is the view of the firm. This has not been done so definitively before but is considered the best way to get to the heart of what is important to the main players. Of course, firms are not human beings and cannot give views. The views in this context are those of senior managers who are instrumental in determining the strategies that contribute to the firm's search for success and competitive advantage, who represent the firms and organisations in question at the top level.

Naturally this means that the views are those of certain, selected people and, therefore, are affected by the subjectivity of the respondent, possible positive reinforcement tendencies, the sunk costs fallacy, the endowment effect, incompleteness and other biases (Thaler, 2015). Such human traits also affect the PFR itself, possibly more than facts and figures. This qualitative approach, a search for insights based on beliefs and not quantifiable phenomena, is, therefore, the most accurate way to assess the topic. In fact, one of the criticisms emerging from the literature review is that not enough is perhaps made of the role of human

agency. Firms and places are mostly collections of people who do not all act in consistent, rational and predictable ways. Throughout this work the firm will be referred to as the unit of analysis but, more precisely, this is an *organisational view* synthesised from input from one or more senior managers on perhaps one or more occasions.

1.6 The Research Questions

The research specifically addresses three questions arising out of the foregoing.

1. What are the key factors in the place-firm relationship contributing to competitive advantage for UK finance firms?
2. How can we analyse these factors to make comparisons and identify patterns across firms, cities, sectors and other aggregations?
3. How can this contribute to a comprehensive view of the PFR combining theory from strategic management and economic geography?

1.7 The Contribution

The genesis of this study is the search to understand the forces at work in the PFR. To understand these forces, however, it has been necessary to build a whole new way of collecting and analysing relevant data on the subject. The contribution is thus multifaceted. Firstly, I have brought together strands of theory and literature from strategic management, economic geography, cluster theory and city growth theory and combined these with qualitative data from firms in a new, inter-disciplinary framework for analysis of the PFR. This has yielded a comprehensive overview from which a new model has been developed for the PFR, capitalising on the complementarity of much of the literature and filling the gaps with feedback from those directly involved.

Secondly, I have shown how this model can be applied, in this case through a comparative study of financial services firms in Edinburgh and Glasgow. I have defined the key success factors in the PFR that are seen to underpin competitive advantage for these firms and these places. Some factors are much more important than others. Some patterns and interdependencies are evident. Some findings are predictable whilst others are surprising and merit further investigation.

From the creation and then the application of the new model I have identified implications for theory, policy and practice, highlighting how these findings can be used to better inform strategic decision making by both businesses and economic development agencies to

achieve competitive advantage. By presenting the comprehensive overview the priorities, connections and disconnections, strengths and possible weaknesses can be identified.

The contribution in these areas opens up a range of opportunities for new, wider, interdisciplinary research in academia and also for practical action amongst business participants on this crucial yet neglected subject. These opportunities and recommendations for next steps and further research are detailed at the end of Chapter 6.

2 Theory and Literature

This chapter reviews a wide selection of literature and theory relevant to the topic starting with the origins of scientific management and the emergence of strategic management within this. It then goes on to consider work in economic geography, the work of Porter that seeks to bridge between the competitive advantage of companies and the competitive advantage of places and, lastly, developments around the growth of cities and the importance of talent to modern business success. The chapter concludes by outlining significant gaps in the existing literature, particularly in terms of strategic management's blindness to place and the relative downplaying of company individuality and human agency in economics and economic geography.

2.1 Place and Strategic Management

Despite the significance of the PFR as noted, strategic management theory is neutral about place in the wealth of literature analysing corporate success. There is extensive writing on the ex post facto implications of the place decision, on macroeconomic environmental scanning and network interactions for example (Clegg et al, 2011; Lynch, 2006), but little on the how or why around the decision. One exception is the body of work, largely in International Business, on multinational enterprises (MNE) and foreign direct investment (FDI), for example Dunning (1998), but this is narrow and specialist relative to the scale and importance of the place-firm relationships for all activities, in every industry in every country across the world. The reasons for this relative silence go all the way back to the origins of scientific management and strategic management thinking.

2.1.1 The emergence of scientific management

In 1899 Frederick Winslow Taylor studied labourers loading pig-iron at the Bethlehem Steel plant in the Lehigh Valley, eastern Pennsylvania. He observed the process closely and applied mathematics and reasoning with the aim of improving productivity. He later wrote about his conclusions in his seminal work *The Principles of Scientific Management* (Taylor, 1911). This did much to establish the concept of scientific management, the idea, akin to positivism and theories developed in natural sciences, that there are identifiable laws governing how businesses can best be run. Although his methodology and findings have since been called into question, Taylor contributed significantly to implanting the basic thought that industrial and business processes could and should be studied and that efficiency and productivity could be improved by adopting measures based on rigorous scientific analysis and the resultant theories. This proved to be a popular credo even though the first case study was

discredited. It is, indeed, an enduring feature of the development of scientific management that there has consistently been a hunger for relatively simple, rational, scientific explanations for industrial success even though these explanations have not always stood up well to comparisons with empirical evidence and reality, as with Wrege & Stotka (1978) and Wrege & Perroni (1974) on Taylor above and Levitt & List (2011) and Carey (1967) on Mayo below.

Equalling Taylor in fame and influence, albeit from a more sociological base than a mathematical one, was the work done by Elton Mayo at Western Electric's Hawthorne plant in Chicago between 1927 and 1932 (Mayo, 1933). The emphasis here was on analysing the non-quantifiable human factors influencing production processes. As with Taylor, subsequent scrutiny has revealed significant flaws in the study and the corresponding lessons and recommendations (Levitt & List, 2011; Carey, 1967) but the very process of studying behaviour and drawing conclusions for improvement reinforced the belief that management could be subject to theories and that generic lessons could be learned that should be useful for businesses seeking to improve performance. The science of management was set on the road to becoming an enduring concept.

Both these cases were very place specific, Bethlehem and Chicago, but neither Taylor nor Mayo attributed much to place in their studies, to the factors behind why the firms they studied had chosen to locate where they did and how the place might have influenced the culture and attitudes of those studied. Taylor only laments that the English and Americans do not carry their strenuous efforts in sport over into the workplace (Taylor, 1911). Mayo goes so far as to note in the first paragraph of his book "...the human problems of industrial organisation remain identical for Moscow, London, Rome, Paris and New York." (Mayo, 1933). Place differences are either ignored or deemed irrelevant. We are left to assume that behaviour in the work-place revealed universal truths and derived nothing from place and the wider environment in which the firms existed and the workers lived.

The idea of management as a science continued to gain ground as the twentieth century progressed and it continued to be dominated by this introverted approach, from the study of worker productivity to the study of the immediate work environment to the study of company organisation. For example, in 1943 Peter Drucker, a young professor from Bennington College in Vermont, began a two-year study of the General Motors (GM) corporation resulting in his book *The Concept of the Corporation* (1946), a work stressing the efficacy of GM's managerial practices and internal organisation. This proved very popular

and Drucker went on to become a prolific writer about business and one of the most influential management science academics.

The resonance of the study and its ideas was underpinned by the very visible success of GM, where Alfred P. Sloan led the company between 1920 and 1956 into overtaking Ford as the world's leading automobile manufacturer. Sloan himself also recorded his success in a major and popular contribution to management theory, *My Years with General Motors* (Sloan, 1964), which further elevated the importance of organisational structure and of individual managers.

GM was located near Detroit, Michigan, next to its great rival and the other giant of early 20th century industrial development, Ford. The development of both these companies was the subject of considerable internal and external scrutiny through the lens of the new science of management yet those noted here, reflecting on the reasons for the firms' successes, did not investigate the role of place. Henry Ford, Alfred Sloan and Peter Drucker were not reticent in theorising about business but, like Taylor and Mayo, they looked inward and were blind to any influence from the spatial context despite the fact that the decisions of these two global giants to co-locate is unlikely to have been random. Ford (1922) very briefly describes the advantages of his River Rouge plant in terms of steamship access and proximity to coal but makes no particular claims for the location as a source of competitive advantage. The key, according to him, is in the efficient internal organisation, the consolidation of mass production. Sloan (1964) says even less about place. His story is all about organisation and market forces. As for Drucker, he is credited with developing the concept of *managing by objectives* and he identified eight areas where managers should set objectives, but place was not mentioned (Drucker, 1955). The approach of these key figures in the development of scientific management thinking did not extend to the possible contributions of the place to corporate success. Their concentration on management technique and organisation swept aside any consideration of the question, "why Detroit?"

Most of the early work on scientific management was centred on businesses like Ford and GM located in the north-east of the United States. This is not surprising as this area accounted for 74% of US manufacturing employment at the beginning of the 20th century (Krugman, 1991). This was the most dynamic industrial region in the world, where massive companies were growing to dominate not just the United States but the global economy. Yet there was scant regard given to the question of "why here?" There was no mention of what, if anything, firms got from the PFR in this particular area that they could not get elsewhere?

There was indeed a co-existence of resources and transport links that, coupled with good management, could have given the foundations of success but the theories did not address such possibilities, not even to dismiss them as either obvious or irrelevant.

Drucker (1946) does talk generally about the importance of American Christian values like equality of opportunity, uniqueness of the individual, the emphasis on education and the need for dignity and status in industrial society. He stresses the need to recognise the corporation as a social institution, not just a place of work. These are place factors in a broad sense, but they were presented more as pertaining to political philosophy than geography. The message is that the type of organisation required for business success is only possible with American values, as opposed to the collectivism of Nazi Germany or Soviet Russia. It was not so much about being in America as about the triumph of the “American way”. Drucker articulated what many, following in his footsteps, would just assume and believe did not need saying, that business success and the American value system were inseparable. This position actually contributed to the blindness about place in scientific management through a prevailing circular logic. If the American way is essential for corporate success then corporate success is proof of following the American way, no matter where you are in the world.

The study of management as a science and belief in the “American way” were pillars of the thinking of the key protagonists in the industrial revolution sweeping the north-east of the United States. This thinking fed their commitment to continuous improvement and allowed them to rationalise their central roles in delivering business success. This apparent virtuous circle of theory, business improvement and success were further supported by educational institutions. Wharton, the business school of the University of Pennsylvania, was established in 1881 with a grant from Joseph Wharton, who incidentally owned 25% of Bethlehem Steel. The Amos Tuck School of Business at Dartmouth College, New Hampshire, was founded in 1900. Harlow Person, the Dean, organised the first conference on scientific management in 1911 and was president of the Taylor Society (Stewart, 2009). Both Taylor and Mayo worked at Harvard. Drucker went on from Bennington to New York University. An industry grew up in management education alongside, and closely linked to, the remarkable growth in manufacturing industry generally and the above connections are indicative of the tight-knit network of leading industrialists working hand-in-hand with academic champions of the new science (Freedman, 2013; Stewart, 2009).

The growth in academic interest did not produce a broader view of the subject, however, partly because the network was so tight and closed. The same figures and the same doctrines of scientific management dominated thinking both in businesses and business schools, thinking that was by nature myopic in terms of place. The early investigation around management as a science clearly and irrevocably established the idea of linking scientific study to business improvement and contributed ideas about the tangible and intangible factors affecting process efficiency. It also established the importance of good management and organisational design in shaping the best use of these factors for business. The universal theories that emerged about how business worked were firmly grounded in this one geographical area however, the north-east of the United States, and in one set of values, the “American way”, which meant place was largely ignored as a distinctive or differentiating influence on business success.

This blinkered view was reinforced by the strong inter-relationships of large corporations, management education and academic research at the beginning of the 20th century which generated a centre of gravity in the north-east of the United States that tacitly assumed the PFR there was generalizable to the world. This has significantly influenced all management science thinking since and has led to a gap in the literature and theory (McDonald, 2017; Herrington, 2010).

2.1.2 The emergence of strategic management

Strategic management grew as one of the most important branches of the new approach to management as a science. One of the earliest proponents was Alfred Chandler who was also a graduate of the GM School having worked as a research assistant for Sloan in the writing of the latter’s book (Sloan, 1964). He drew on this experience to write *Strategy and Structure* (Chandler, 1962) based on analyses at four major companies in the north-east of the United States; GM, DuPont (Wilmington, Delaware), Standard Oil (New Jersey) and Sears Roebuck (Chicago). Although his focus was, like Sloan’s, on organisational structure as key to success he was one of the first writers to highlight the broader concept of strategy as a distinctive branch of management science.

He epitomised the inner circle of business figures and academics already mentioned who were setting the course for the discipline. His middle name was DuPont, reflecting a family connection to the eponymous firm, and he was a Harvard graduate. When he published *Strategy and Structure* he was teaching at the Massachusetts Institute of Technology (MIT) from where he went on to Johns Hopkins University in Baltimore and then back to Harvard (Freedman, 2013; Sparks, 2007). He had no difficulty bridging between academia and the

leading companies. For example, his relative, Pierre S. DuPont, was the leading shareholder and President of DuPont, was also President of GM from 1920 and was on the Board of MIT from 1916 to 1951. Furthermore, Chandler notably acknowledged the financial support he received from the Sloan Research Fund at MIT at the beginning of his book (1962). This tight-knit DuPont, GM, MIT, Harvard nexus was typical of the networks dominating the early work in strategic management across business, research and education. It was evident in the early years of scientific management development and transferred easily to the ensuing development of strategic management, much to the detriment of any new thinking about the role of place. Ironically, the strong, place-based local networks of the US north-east were instrumental in the evolution of strategic thinking that ignored the role of place-based networks and other place-based forces.

The discipline was taken beyond looking just at organisation and process, however, by Igor Ansoff, often described as the “father of strategic management” (Strategic Change, 2002, vol. 11) as a result of his early, ground-breaking book on the subject (Ansoff, 1965). He similarly advocated “management decision-making through systematic and logically sound procedures” (Ansoff, 1965 ed., p. 21) but set the discipline on a broader canvas, emphasising the need to review the external environment and to position the company in this environment. He was highly prescriptive as to how this should be done, as if managers were military commanders and strategic management was an extension of military strategy, an analogy that became pervasive.

Unlike a general deploying his troops on a battlefield however, Ansoff’s emphasis on positioning was nothing to do with geography but was about a more figurative market positioning. It was about assessing competitive threats and finding competitive advantage in the business environment, in the milieu of market forces. In terms of place, Ansoff was still well grounded in the north-east of the US as representative of anywhere and everywhere. Although he had a Russian upbringing and had worked for Lockheed on the US west coast, he was also a product of the north-east US industrial-educational complex and his research was done out of Carnegie Mellon University in Pittsburgh, (Freedman, 2013). The external environment that informed his thinking was in relation to the industry, the market and the competition. He had little to say about a strategic approach to choosing where it might be best to develop a business nor even what was so great about the north-east of the United States, about the place attributes that were perhaps contributing to business success in the world’s industrial power-house. This pioneering work by Ansoff and others gave a centrality and weight to the development of strategic management out of the broader consideration

of scientific management, but it did nothing to enhance the view of the possible role of place in the success of firms.

2.1.3 The focus on competition

This neglect of the role of place in strategic thinking went deeper than an inability to look beyond what was outside the window. It was also linked to the emerging ethos that linked strategy with competition and then with competitive advantage.

Ansoff and others had theorised on competition and competitive advantage, but this was sharpened considerably in the work of Porter (1980; 1979). Porter asserts that “the essence of strategy formulation is coping with competition” and his approach is again redolent of military strategy, with talk of “combatants” (Porter 1979, p. 137). The message is that to achieve competitive advantage it is necessary to beat one’s rivals. Furthermore, a company must also strive to dominate those it deals with. Porter (1979) focused on external factors like relationships with suppliers, customers and rivals and threats from substitutes and start-ups as battles to be fought and foes to be overcome. The aim of strategy was to subdue all around you. It was an aggressive, company-centred, ruthless approach echoed even more strongly by Bruce Henderson in *The Origin of Strategy* (1989), which characterised strategy as the basis of a primal struggle in a process of Darwinian selection. He notes “Unless a business has a unique advantage over its rivals, it has no reason to exist” (Henderson 1989, p.141).

This preoccupation with adversarial competitiveness came to dominate strategic management. It bolstered the image of the company fighting alone to survive in a hostile world, an image popular with US managers in its celebration of heroic individualism and the triumph of hard work and enterprise. This is a view of achieving competitive advantage that leaves little room for place, however, although ironically the character traits that gave fertile ground for its acceptance were arguably rather American, rather place specific (Drucker, 1946).

It also represents a bifurcation in thinking about competitive advantage. From at least as far back as the work of Marshall which reflected on the localisation of industry and “industrial districts” (Marshall, 1st ed. 1890), economics and economic geography have been concerned with the apparent attractions of business agglomerations and clusters and how these might relate to achieving competitive advantage through a mixture of competition and co-operation (Newlands, 2003; Ottati, 1994; You & Wilkinson, 1994). This idea of businesses clustering together to share resources, or know-how or market access; of an alternative view

of achieving competitive advantage through capitalising on interdependencies, knowledge spill-overs and co-operation, runs counter to an intense focus on aggressive competition that by its nature feeds an insular, protectionist mentality that is likely to see everything outside the walls of the company as a threat. The more inclusive view of place is more likely to see both advantages and disadvantages in the spatial environment; to see opportunities, for example, from collaboration and sharing as well as threats.

These differences, especially the apparent contradictions in Porter's own work when he turned his attention to place and competitive advantage (Porter, 1998), are considered in more detail later in this chapter. To this day however, the linking of adversarial competition to competitive advantage remains a defining feature of strategic management. If anything, strategic management went on to become more introverted in the style of Taylor and more insular as others began to look increasingly inwards for the keys to business success via market domination. For example, Barney built on earlier work (Wernerfelt, 1984; Penrose, 1959) to concentrate on a firm's internal resources as the source of competitive advantage (Barney, 1991) and Prahalad and Hamel refined this in the search for core competences (Hamel & Prahalad, 1994; Prahalad & Hamel, 1990). In their 1990 article they open with the unequivocal statement, referring to identifying and exploiting core competences as "The most powerful way to prevail in global competition.." (Prahalad & Hamel, 1990, p.79). This sets an unarguable goal for their work as assisting companies to win in the fight against competitors by harnessing their inner strengths. No consideration was given to the possibility that internal resources and core competences could be significantly affected by place however, despite the fact that the article is pitched as a response to, and explanation of, Japanese business success.

Research attention shifted back and forward from the internal to the external but always with the same presumption of firms being in existential battles with each other. Treacy and Wiersema published very influential work based on market-oriented value disciplines (Treacy & Wiersema, 1995; 1993) but the driving force remained the search for the competitive edge to prosper at the expense of others. Coming more up to date the reconstructionist approach by Kim and Mauborgne in their *Blue Ocean Strategy* (2014) is centred on competition and ways to outflank existing businesses through finding "uncontested spaces". These spaces were related to market position, though, with no consideration of geography.

The increasing interest within strategic management in the growth of service and technology companies and the importance of knowledge management and knowledge transfer has not

changed the assumed basis for all strategy, namely the largely self-sufficient company fighting competition in a hostile environment. Peter Senge wrote extensively about learning organisations (1992) and Arie de Geus about *The Living Company* (1999) both emphasising the importance of knowledge and learning for company health and survival and again, looking inwards to find the strength to prevail over those around. The latter work was surprisingly introverted given that it was based on experience with Royal Dutch/Shell, a perennial multinational with binational ownership and a famous capacity to accommodate and benefit from national and regional differences rather than impose a centralised business model (Howarth, 1997). Along this continuum, Lubit writes of tacit knowledge (2001), identifying the internal production of such knowledge and company knowledge management as the keys to sustainable competitive advantage but with no suggestion that place factors might have an influence on how such knowledge is gained and transferred.

In a compilation of work on strategic management in the knowledge economy that included work from Senge, Porter, Hamel and others (Leibold, et al., 2005), examples were cited from around the world of different ways companies are adapting their strategies to the new knowledge economy. There is no reference to any implications from being in different places, however; there is an implicit assumption that lessons are generalisable irrespective of location. Others writing more recently on this subject, for example Dalkir (2017) and Becerra-Fernandez & Sabherwal (2015), focus on knowledge creation and sharing but all within the organisation, not as part of collaborative networks involving external parties. The new knowledge economy is another battlefield pitting the firm against the rest of the world. This approach contrasts sharply with the view from economic geography considered later that knowledge creation and sharing are key place differentiators and underpin modern agglomeration and the strong growth of city clusters.

Strategic management became, and has largely remained, synonymous with finding ways to beat the competition. This has reinforced introversion and insularity in the domain and a neglect of the possible influence of place factors. There are three principal reasons for this preoccupation with competition to the exclusion of other considerations.

2.1.4 Reasons for a focus on competition

a. Growth in competition and anti-trust sentiment

In the period after the Second World War, competition was intensifying. There was nothing in Chandler's or Drucker's early work as cited about competition, but this was becoming

much more of an issue for US businesses¹. Not only was competition increasing but so was public and government awareness of, and aversion to, anti-competitive behaviour. Ever since Standard Oil was dismembered into 34 different entities after a Supreme Court ruling in 1911 big businesses in the US in particular have been sensitive to the need not only to be competitive but to show they are being competitive (Hylton, 2003). Co-operation in the public mind was associated with monopolistic behaviour, cartels and price fixing. To take an example already mentioned, when Peter Drucker published his book based on experiences at GM (Drucker, 1946) he received a cold reception from Sloan despite the facts that it was generally very complimentary and specifically praised GM as a model for other large corporations. One reason for this was his revelation of Sloan's deliberate measures to limit company growth to prevent anti-trust suits (Freedman, 2013). GM's lawyers even initially blocked the publication of Sloan's own book in 1964 because they feared the government might use documents cited in it as the basis for an anti-trust action and Chandler faced similar reservations at GM in relation to his access to, and use of, the Company's archive when working on his study (Freedman, 2013).

The relationship between DuPont and GM already mentioned was scrutinised in this context and led to a US Supreme Court ruling in 1957 that DuPont had to give up its significant shareholding in the automobile maker (Hylton, 2003). As noted, thinking about the role of place could often lead to thinking about co-operation, about networking and sharing of information and resources, which in turn could appear anti-competitive and thus open to anti-trust law. This was an era marked by intense competition in the United States that was deliberately stimulated by the government. Company executives, government and the public at large (at least in the United States) wanted to hear about a capitalism contained by healthy competition not about businesses clustering to work in cahoots. There is considerable evidence of this sensitivity to anti-competitive behaviour even today with rumblings of concern about the market dominance of the "big tech" giants, Apple, Amazon, Facebook and Google (Smith, 2018) and recurrent scandals in financial services, in particular relating to insider trading and market manipulation.

b. The professional managers

A second factor in the dominance of competitiveness in strategic thought was the growing importance of the professional manager as opposed to the owner manager. Ford, Rockefeller

¹ Competition was less of an issue for European and Asian businesses where priorities centred more on reconstruction efforts which, by their nature, required a greater emphasis on collaboration, note Maull (1990). It was the US business environment that dominated thinking however.

and DuPont owned large stakes in their companies and ran them imperiously. Alfred Sloan and Jack Welch, CEO of General Electric between 1981 and 2001 and esteemed role model and writer on management, e.g. Welch & Welch (2005) and Slater, (1999), were professional managers. As companies became bigger and more complex after the Second World War they were run largely by cadres of such professional managers and owned by an ever wider and growing number of shareholders (Chandler, 1977). For example, 6 million Americans, 4% of the population, owned shares in 1952. By 2002 84 million Americans, 29% of the population, owned shares, (NYSE, 2018). These managers, professionals acting for a very wide body of owners, were both a source of management theory and a large and growing market for the books about it. This theory, as described above from writers like Ansoff, Porter, Henderson, Barney, Prahalad & Hamel and others, tended to underpin a belief that top managers could control the company forces under them like generals and steer them through turbulent conditions and this, in turn, gave ample justification to their legions of shareholders for their high status and remuneration. This literature was empowering and very appealing. It offered managers the tools to take an ordered approach to their work and it offered insights, often from their supposed peer group, into what others were doing that they, too, could and probably should do. Above all, it set their work in an heroic role as a fight against external forces, competitors, for their very existence and thereby justified heroic status and high rewards. The inconvenient truth that if everyone followed the theories advocated then they would be worthless, that they relied on there being a few winners amongst a great many losers, was conveniently ignored.

Works advancing and embellishing this mould by Peters and Waterman (1982), Collins (2001) and Collins and Porras (2005) were best sellers and typified this extension of the rational and prescriptive management science view. Although these books took pains to consider the historical perspective they did not consider the geographic. Peters & Waterman (1982) produced a highly influential book that sold around the world and explicitly focused on American companies without a) acknowledging what was special about America in the companies' success and b) without acknowledging that there might be companies elsewhere in the world achieving equal success other than in the "American way". That is, there was very little about place in these books and the external factors that could shape a company's destiny took a back seat to inspired leadership and competitive practices that could be seen as replicable and applicable everywhere.

c. *The strategic management industry*

The large and profitable industry that grew up around established strategic management thinking was a third factor that reinforced the US centred, adversarial competition centred model. Its cornerstones lay in academic institutions, large, successful businesses and increasingly powerful management consultancies. It was held together with the glue of the growing popularity of management education, particularly MBAs, and journals like the *Harvard Business Review* (HBR) and the management self-help book industry it spawned.

Underpinning this was the growth of positivist social theory and the belief in reason and science to manage all aspects of life. This was not confined to strategic management and the parallel quantitative revolution in post war economic geography (Barnes 2001, 2000) is a good example of interdisciplinary cross-over and the powerful attraction of rational economic and social models.

Reports from Ford and Carnegie in 1959, backed by financial aid, provided a significant impetus to US business schools and underpinned an emphasis on an analytical, scientific foundation and positivist philosophies and methods (Grey & Wilmott, 2005). Enrolment boomed and in 1980 there were 57,000 MBA graduates from 600 programmes; at the same time there were 200 academic journals compared to about 20 at the end of the 1950s (Freedman, 2013).

The primary product of the business school MBA programme became the management consultant, who exemplified and disseminated the American way of doing business through the United States and then the world. In 1950 there was one management consultant for every 154 salaried employees in the United States; by 1995 the ratio was one consultant for every 13 salaried employees (McKenna, 2006). Harvard Business School (HBS) in the north-east of the United States still dominates this industry with assets of \$4.8 billion, much of which has come from wealthy business alumni sustaining the system that reared them. Academic staff act as paid consultants and the widely used HBS case studies are compiled in conjunction with (largely US) companies (McDonald, 2017; *The Economist*, Schumpeter, 2017). The business of business is still booming, and it is a business essentially still built around one product, the American model of capitalism and corporate development.

Undoubtedly there is a great deal to learn from this model. Most of the world's biggest and best corporations have come from the United States and the country's economy still dominates the world. The strength of the vested interests in the industry built up around this model does inhibit the investigation of other possibilities however. It also inhibits genuine

investigation of what lies behind this model, where beating the competition is all, in a free market unencumbered by state interference. Many writers, for example Mazzucato (2014) and Lazzarini (2015), have questioned the ruthless competitiveness of US business and the supposed quiescence of the state whilst others, for example Stiglitz (2002), have challenged the Washington Consensus which is the projection of the American way of business and capitalism at a more fundamental, nation-building level across the world. Stewart (2009) adroitly sums up the *modus operandi* of the industry, showing how it ignores the inconvenient truths and often seeks to destroy rather than build on previous work in his formula for success as a management guru. It suggests that there is a degree of cynicism in the industry that uses real or imaginary crises and built in obsolescence in ideas to keep an idealised model of American business thriving based on this linkage across strategy, adversarial competitiveness and competitive advantage.

One effect of these three forces acting in concert has been to dilute consideration of, and divert attention from, any significance of place. Most place effects with firms are, naturally, built on inter-relationships and, perhaps, co-operation. This does not square well with the company-centred, ruthless war footing encouraged by much of the literature and naturalised (Grey & Wilmott, 2005) by groups with strong vested interests in this approach. Rather than co-operate with other companies to maximise joint advantage most businesses are encouraged to work towards oligopoly and, for example in the case of Porter's five forces, to battle not only competitors but suppliers and customers. This appeals to the hero-manager, the general at the head of his troops, who was the target market for much of the strategic management output in a self-reinforcing circle of development. The commercialisation of work from figures like Drucker, Treacy and Wiersema, Hamel, CSC index, McKinsey, the HBR and the business schools became a big business serving a big market that needed to be nurtured and protected, fed on what it preferred to believe. Business techniques and concepts developed in academia gave backbone to the "American way" and were harnessed for use in the power politics of both US government and industry (Baritz, 2005).

The American capitalist model is essentially low trust, low community, low co-operation as exemplified by this focus on competition (Adler, 2005). There are signs of change with the development of a knowledge economy that requires greater sharing and intra and inter firm co-ordination and this is increasing the focus on place and proximity and the importance of knowledge transfer, which explains the emerging paradox of cities becoming more important at a time when advances in transport and communications technology have offered greater choice in work location (Florida, 2012; Glaeser, 2011). The collaborative community (Adler &

Heckscher, 2005) and the implications for place are attracting more attention but have not so far greatly influenced strategic management thinking.

2.1.5 Strategic management goes east

Even when the centre of gravity of industrial development shifted eastwards to Japan, south-east Asia and China, there was still a reluctance to give greater consideration to place. Much of the academic study of the Japanese economic revolution started from the rational, economic, US, organisation-centred point of view.

This was evident, for example, in work by Pascale in ASQ (1978) and HBR (1978) investigating the differences between Japanese and US companies. He identified the importance of culture in influencing differences in managerial communication but presented this as a guide to how western managers could learn to be more subtle and better at building relationships; tips for improving the American model rather than an examination of place differences that might lie behind the success of a Japanese model. What might have been most revealing was not so much how the Japanese operated the American model with a different, perhaps slightly more effective, communications regime but how they were able to be so flexible and adaptable to adopt so much of the US way of doing business in the first place given the differences in language, values, economic development and recent history.

A further example was George Stalk who went to study Japanese business for the Boston Consulting Group. In an article in the HBR (Stalk, 1988), he summarised Japanese economic success from a standard US business school perspective in terms of clever organisational innovations to achieve competitive advantage. He mentions low labour costs, scale-based strategies, focused factories and flexible factories and he introduces a new source of competitive advantage, innovative time management. Beyond talking of a devastated economy resulting in low labour costs, however, he does not reflect on how place might have uniquely fostered such collective high performance. The most obvious characteristic about the new industrial giants dominating heavy goods and then automobile and electrical goods production is that they came from a different country, a country with a very different history, language, culture, traditions, institutions and other attributes; a country that was impelled by a need to recover from extreme hardship in the wake of the Second World War. None of this was touched upon.

Furthermore, there was little consideration of differences within Japan that may have fostered certain economic behaviour; of competition and co-operation amongst companies within the country. Both Pascale and Stalk talk about “Japanese” methods, almost as if Japan

was one, large, competing commercial enterprise, a company case study alongside Ford or GM.

A very similar though company-specific approach to looking at Japanese success through the lens of the American management science dogma was undertaken by Pascale and Athos (1982). In this the authors compared a US company, ITT, with a Japanese company, Matsushita, using McKinsey & Company's 7S framework, a consultancy product born and bred in the United States. This work included extensive reference to the influence of Japanese culture, particularly in its giving advantages in the softer skills, but the implicit assumption was the same. It was not an analysis of the influence of place in producing certain ways of doing business that proved particularly effective at a particular time. It was, as usual, acceptance of a given (US) template for business success and an assessment of how the Japanese firm had found some ways to improve on certain aspects of this. It encouraged analysts to pick out certain components, like just-in-time (JIT) stock management and quality circles in isolation for "export" without the more fundamental appraisal of what might be different.

This is also borne out strongly in work by Zeitlin & Herrigel (2000) and Marglin & Schor (1990) who start with the dominating American model and look at how it has been adapted and improved through innovations. At the same time authors like Maull in *Foreign Policy* (1990) were talking about German and Japanese values differing profoundly from those of America, that their economic systems were not compatible with a liberal world economy and that blocked national aspirations were being rechannelled towards economic achievements. That there was a bigger world out there with different value systems perhaps better than, or at least as good as, those of the US was articulated by Hampden-Turner & Trompenaars in their book *The Seven Cultures of Capitalism* (1993) and the remarkable progress of Germany and Japan in narrowing the manufacturing productivity gap with America after the second world war was dissected by van Ark and Pilat (1993). Japanese GDP grew three times as much as US GDP between 1960 and 2016 (World Bank, 2018). It is surprising that none of these considerations were picked up more meaningfully in strategic management.

Similarly, in China, many academics and business people have had difficulty getting to grips with the more recent economic revolution there because they are stuck in a mind-set that the businesses are essentially the same as everywhere else, i.e. the US, but they are either cheating, for example, by using irregular business practices like exploiting cheap labour or manipulating exchange rates, or living on borrowed time because unless they adapt to the

more conventional (US adversarial, competition based) view of strategy they will ultimately fail. This is evident, for example, in *How Chinese Companies Disrupt Through Business Model Innovation* (Fischer & Simon, 2016) or *Why China Can't Innovate* (Abrami, et al., 2014).

2.1.6 What has been said about place in strategic management?

The above notwithstanding, strategic management has made some contributions relevant to understanding the PFR. For example, whilst the literature and theory around strategic decision making appears to be largely place neutral, textbooks and teaching on strategic management (Clegg et al, 2011; Johnson et al, 2008; Kaplan & Norton, 2008; Lynch, 2006) emphasise the need for environmental analysis to inform the process. In particular, managers are recommended to use a PESTEL analysis, a tool to help understand the different external factors that might affect strategy implementation, PESTEL being an acronym for Political, Economic, Socio-cultural, Technological, (natural) Environmental and Legal considerations. This is a tool that can help the analysis of prevailing influences, but it does not lend itself to comparing these across different places or to determining the cause and effect relationships amongst factors. It is not the basis for a synthesis to explain the place-firm relationship; it is essentially a series of lists rather than a model or even an organisational framework for analysis.

Place also features strongly in the analysis of FDI. Although this is largely seen as the domain of International Business rather than Strategic Management there is a clear overlap between internationalisation decisions and strategic management within companies; for example, a drive to be more competitive through reducing costs could mean moving production to a country with lower labour costs or a drive to increase return on capital could mean increasing sales in new markets overseas.

Most of the literature in this area focuses on MNEs and FDI and, therefore, portrays a relatively narrow picture. Furthermore, as in mainstream strategic management, place tends to come to the fore more in terms of implementation once a decision to move overseas has been made rather than as part of strategy formulation. The primary focus is on the why and how (e.g. export, licensing or FDI) of internationalising rather than the comprehensive PFR assessment of competing advantages and disadvantages of different places. Dunning's seminal work (1980) looking at international production decisions based on a statistical analysis of Ownership (firm-specific), Location and Internalisation advantages (own production v alternatives), OLI theory, shows this approach well. It addresses these decisions at country level only and focuses on a few country-specific variables like the size and character of markets, production and transfer costs and government incentives.

Alcácer and Chung (2014) look more directly at firm location choices and at the relationship between competitive advantage, agglomeration economies and firm location and particularly the role of factor pools. While germane here, this quantitative study is indicative of the narrow FDI view being confined to first time new manufacturing entrants in the US market between 1985 and 1994. The concept of bringing together diverse variables and interpreting their interaction to explain place decisions is useful but restricting this only to MNE investment at country level and reducing the differences between firms and between countries to a handful of quantitative variables is little more than a starting point in the investigation of the PFR.

Globalisation and the current priority around knowledge creation and transfer has more recently broadened thinking about FDI, particularly in viewing it as a two-way, dynamic relationship. Multinationals are no longer necessarily characterised by a series of international subsidiaries feeding in to a corporate headquarters but more by a network of strategic locations interacting globally amongst each other and exchanging knowledge and other resources (Regnér & Zander, 2014). In fact, some commentators have suggested the MNE should be the new unit of analysis as opposed to the country to examine this growth in cross-border knowledge sharing and development (Beugelsdijk & Mudambi, 2013).

This trend is particularly true of industries like financial services, the test bed for this research, where the global majors really must have a stake in several prominent cities. Having a dispersed global presence like this has the added advantage for knowledge-based industries of facilitating the transfer of resources easily and quickly without completely leaving anywhere but just changing the dispersal weightings. This has been noted by several leading commentators.

“MNEs now have a greater potential to benefit from a synergistic locational portfolio of complementary sources of knowledge” (Cantwell, 2009, p. 35).

“I believe more attention needs to be given to the importance of location per se as a variable affecting the global competitiveness of firms..... the structure and content of the location portfolio of firms becomes more critical to their global competitive positions” (Dunning J., 1998, p.60).

These writers are emphasising that place is a key part of strategic decision making, a possible source of competitive advantage, and, furthermore, that place decisions should contribute to a “location portfolio”. Companies can gain strength, can generate competitive advantage,

by allocating their resources over a number of places and by regularly reviewing and adjusting their place/resource investments.

Other relevant considerations from International Business and FDI include research on the importance of the regulatory regime and intellectual property (IP) protection (Coeurderoy & Murray, 2008), the role of human behaviour and quality of life in addition to purely economic considerations (Schotter & Beamish, 2013) and the interaction between MNE behaviour and location in global cities (Goerzen, et al., 2013). Although still constrained by largely focusing on MNEs at country level, International Business is starting to embrace the more significant and multifaceted role that place could and should play in strategic management. Some of the latest thinking from this discipline has contributed to the analytical framework for this research.

2.1.7 The need for a new perspective

Strategic management thinking has evolved from positivist, scientific management thinking and inherited its blindness to place and its America-centred approach. It has assumed there is only one place, the north-east of the United States, which can represent anywhere and everywhere in exposing universal laws unmoored by geography. This has led to an aggressive, self-reliant, adversarial and existentialist preoccupation with beating the competition that has left little room for the role of co-operation, sharing and constructive competition that might be associated with the role of place in competitive advantage, for example in industrial districts (Marshall, 1st ed. 1890) or clusters (Porter, 1998). The approach has generally been highly prescriptive, appealing to an audience keen to show the efficacy of management agency in planning and implementing corporate strategy. This prescriptive element has been strongly challenged, particularly by writers like Mintzberg (1987) who championed the emergent theory of strategy and strategy as a craft whereby strategy is developed in the light of unfolding circumstance. There has also been movement between contingency theory with its emphasis on the external and resource-based theory with its emphasis on the internal (Kay, 1993) but throughout there has been a distinct lack of interest in place as a producer of strategic assets, as a determinant of success in achieving competitive advantage.

These orthodoxies of place blindness and the battle for survival against competition have been reinforced by a combination of the increasingly competitive market conditions businesses faced (or at least preferred to portray), by the ascendancy of highly paid, influential, professional managers and by the sheer weight, and cognitive support of the business education and management consulting industries that grew up around propagating

this thinking. The discipline has been captured by questionable standards supported by apparently unassailable, institutionalised, vested interests in a manner not unlike the logic-defying prevalence of the QWERTY keyboard (David, 1985). The way business was seen to be done in the north-east of the United States became a standard for the world which prestigious management education institutions and large and very profitable consultancy firms made it difficult to challenge. Even when US industry woke up to the shock of Japanese competition there was little emphasis on place and few attempts to understand the deeper effects that different places might have on corporate success. Rather, interpretation revolved around what happened in the work-place and how this related to the “made in America” established template for success rather than what lay behind this in quite different communities. Even in considering businesses thousands of miles away in different continents there was a tendency for the mostly US (or at least US trained) management academics and consultants to assume a homogeneity to place, as noted in section 2.1.5 above.

This did produce a reaction in some quarters, notably in France where the press baron and politician Jean-Jacques Servan-Schreiber found a significant audience for his book *Le Défi Américain* (Servan-Schreiber, 1967), but this was more the exception than the rule; the US model generally prevailed. In the United Kingdom in 1970, for example, 72 of the top 100 companies had adopted US style multi-divisional company organisations, 32 of them under guidance from US consultants McKinsey (McKenna, 2006).

Underlying all this there was, therefore, a definite place bias, an assumption that one place was representative of all as far as businesses were concerned and that one place was the north-east of the United States. There has been this constraining monocultural and linear view in the evolution of management thinking (Cummings & Bridgman, 2016). This myopia has continued even as business has become more international and other countries and regions have grown in economic significance. The analysis of the dynamism of SE Asia and China is being largely considered against a US template. The distinctiveness of different places and the effects of this distinctiveness on business organisation, structure and performance have not been fully analysed. To do this a new and more challenging perspective on the role of place in strategic management is required. This research introduces this new perspective.

Despite the foregoing, there has been some consideration of location and place but more in the context of strategy implementation, in macroeconomic environmental scanning (Clegg et al, 2011; Lynch, 2006), and in MNE international expansion (Dunning, 1998). Literature in

these areas has at least highlighted some of the factors that businesses more generally should be considering in an analysis of the PFR.

Furthermore, the long and rich legacy of strategic management theory presents a rich menu of factors governing corporate success. This gives a useful check-list for questioning the role place might have in relation to competitive advantage. For example, from Taylor, Mayo and Chandler we can think of how place might affect organisation and culture. From Ansoff, Porter and Henderson we can note the importance of competition and the competitive environment and how place affects these in areas like access to markets, quality and cost of suppliers, strength of rivals and government policy. From Barney and Prahalad & Hamel and others we can think of the firm's access to, and cost of, talent and other resources and how these are affected by place. From work on the successes of Japan and China and other Asian countries we can be more attuned to the importance of different institutions and cultures. From environmental scanning and FDI we can note factors considered important in areas like new market entry and overseas expansion. All these elements will feature in the construction of the framework for analysis that is central to the methodology of this research and to giving a new perspective on the PFR.

2.2 The Firm and Economic Geography

The view from strategic management of the relationship between firms and places is far from comprehensive. Consideration of thinking from other disciplines, particularly economic geography, may help to fill the gaps. Differences in the economies of different places and the spatial configurations of firms and industries are central concerns of this discipline (Sheppard & Barnes, 2000; Clark et al., 2000). Furthermore, the work in this area has always looked beyond given, natural features to explain economic disparities; greater emphasis has been given to how the resources of a place have been developed (Marshall, 1st ed. 1890). This is at the heart of the PFR study; how firms and places have worked together to achieve economic success by using the assets available.

Economic geography is concerned with location theory, uneven development, agglomeration, city growth, cultural and social factors, institutions and – more recently – knowledge creation and transfer, amongst other very relevant topics, (Clark et al., 2000; Scott, 2000). It embraces the notion of the PFR as a two-way phenomenon; that there is the likelihood that there are links of mutual benefit between successful firms and successful places.

There are also gaps in this literature however. Most relevant studies have been at the industry level and there is little on the workings of individual businesses. The view has been largely top down and descriptive, starting with the place and analysing firm connections and interactions, rather than bottom up, starting with the firm and its strategies and how these might build towards the connections and interactions that make for the success of both firms and places. Firms have often been seen as homogeneous black boxes where the internal workings are considered to be more or less uniform and where the reactions to external stimuli, challenges and environmental factors are generally predictable and much the same. As with strategic management, however, thinking in this discipline has a lot to offer in terms of providing building blocks for a productive, albeit incomplete, PFR analysis.

2.2.1 Location theory and the quantitative turn

Economic Geography has its roots in the late 19th and early 20th centuries in work that was largely descriptive of the great trade and industrial developments of the time (Chisholm, 1889; Smith, 1913). It sought to portray the human and economic sides to geography alongside the purely physical approach and was full of facts highlighting the great economic differences across the world and the resulting trade flows and uneven development. Commerce was largely dealt with at the macro, industry level with no consideration of the role of individual firms or even generalisations about their motivations.

Some of the earliest theorising behind economic geography and a possible opportunity for convergence between place and businesses came with Weber and industrial location theory (Weber, 1929). This represented a sharp move to a heavily statistical approach whereby it was proposed that the location of firms could be both explained and predicted based on the minimisation of three factor costs, transport, labour and agglomeration/deglomeration. Weber built on Launhardt's location triangle (Perreux, 1998; Launhardt, 1882) and assumed universal patterns of behaviour based on rational economic decisions by essentially homogeneous manufacturing companies, Marshall's *representative firms* (Marshall, 1st ed. 1890). The ensuing models attempted to be comprehensive but had difficulty in showing the relative importance of different location factors and in representing the often over-riding influences of human practices, habits, laws and systems (Hamilton, 1967). The significance of chance and government policy and intervention were also missing. It was conceptually powerful and an attractive, precise and relatively straightforward body of theory but it failed to fully reflect reality.

Much work has been done to make the early economic geography models more sophisticated and more all-encompassing of the variables affecting location decisions.

Hamilton, for example, introduces three different types of entrepreneur to differentiate between decisions made by the state, the private capitalist and the corporate capitalist, (Hamilton, 1967). It was also recognised that models could be more elastic and could be geared to satisfactory rather than solely optimum alternatives, (March & Simon, 1958). The significance of chance or random decisions, the influence of personal interests, the preference for the known against the unknown (Katona & Morgan, 1952) were also cited for consideration as models sought to be more representative. It became an increasingly complex and data driven field although it was always recognised that there were dangers in ignoring aspects that could not be expressed in figures. This quantitative turn paralleled the growth of positivist social theory and the belief in reason and science to manage all aspects of life that was driving management science. Models were developed to cover demography, sociology, economic development, urban geography, industrial location and agricultural activity (Chorley & Haggett, 1967) to establish the science of economic geography.

Despite the efforts to fine tune the models and provide a comprehensive cover, however, there were two significant drawbacks in the quantitative modelling approach in the context of this paper. Firstly, the locational modelling did not address all the factors affecting location decision making and the wider PFR. It could not adequately accommodate the influence of the institutional, cultural, political, historical, and environmental aspects on location decisions, (Hamilton, 1967). Secondly, and most significantly, the modelling approach never went beyond the industry level of analysis when dealing with business. Yet industries do not make decisions about place, firms do. In western capitalist economies at least, industry location is inevitably just an expression of decisions made by one or more firms. This can be influenced by state intervention, but it is only in exceptional cases in centrally-planned economies that there could be any conception of a decision to locate an industry.

This meant, of course, that specific companies and the rationale behind their location decisions were not analysed. Companies are internally different, are not always economically rational and, even in the early twentieth century, were not all basic manufacturers. Particularly given what is suggested about their behaviour from strategic management, that firms are in a perpetual battle to differentiate themselves, it would appear short-sighted to assume all firms do much the same things and act in the same, economically rational manner as a cohesive industry block. Kay (1991) notes that the failure of economists (and by association, economic geographers) to go below the industry level of analysis left a vacuum that was filled by management theories of strategic management. He also remarks (Kay,

1993) that Ansoff (1965) himself commented on the inadequacy of traditional microeconomic theory to explain what goes on in firms.

The above notwithstanding, location theory highlighted some of the key factors undoubtedly influencing the PFR then and now and clearly showed how these factors did not work independently but combined and interconnected in different ways that could be analysed with a view to location optimisation. Consideration of these factors and of the complex web of interconnected influences that contribute to the PFR is included in the new framework for analysis created here.

2.2.2 Agglomeration theory

Location theory and quantitative analysis are still important in economic geography, but the discipline has swelled to encompass many other approaches. The rational, neoclassical economic base has been questioned by economic geographers who introduced ideas about cognitive behaviour and emphasised the role of human choices beyond rational, quantitative models, for example by Schoenberger (2001, 1997). A strongly Marxist orientation influenced the discipline as well for a while as economic geographers sought better explanations for spatial inequalities in the struggles between capital and labour, for example by Swyngedouw (2000). Such approaches introduced new thinking that broadened the outlook of economic geography but did not specifically address the PFR. They took, on the one hand, a rather narrow view at the human, cognitive level or, on the other hand, a rather grand sweep of history view at the macroeconomic and political level.

One area directly relevant to the PFR that draws on the other approaches developing in economic geography and that has achieved prominence is the theory around the process of agglomeration and the formation of industry clusters². It has been suggested that this is really at the core of research in economic geography (Malmberg & Maskell, 2002) and it certainly speaks to the main concerns of this research, the relationship between the wider influences of place and the reasons why businesses, especially successful businesses, choose to locate where they do.

Clusters of like or related businesses are clearly observable phenomena and certainly core to the consideration of the PFR. We can see clusters of restaurants in parts of towns; clusters of retail outlets in shopping centres; clusters of financial services businesses in major cities.

² Industrial clusters are here considered as the observable phenomena resulting from the different processes of agglomeration, in line with work by, for example, Gordon & McCann (2000).

History has seen clusters of iron foundries in Britain during the industrial revolution and clusters of automotive manufacturing businesses around Detroit in the USA and the West Midlands in the United Kingdom. There are definite tendencies for businesses to concentrate in certain places, apparently in pursuit of economic advantage.

The recognition and study of clusters dates back at least to Alfred Marshall who developed ideas on the localisation of industry and talked of industrial districts, (Marshall, 1st ed. 1890). He noted several main reasons why businesses should choose to come together in certain places including natural conditions and court patronage, but he put greatest emphasis on how such initial advantages were used and how they gained a critical mass; on how businesses turned their locations and proximity into economic advantage.

The existence of clusters is clear; what is less clear is how and why they form, how and why businesses turn location and proximity to their advantage, and which cluster attributes are causative and which resultant. These questions were vigorously pursued in the 1970s when, partly due to pressure from economic upheaval including the first oil crisis, some regions in the west that were tied to traditional heavy industries, like the Midlands and Scotland in the United Kingdom and the north-east of the United States, began to decline while growth emerged in new areas like Silicon Valley in California, the north of Italy and Bavaria. Some industry clusters were clearly losing out whilst others were in the ascendant.

One theory behind the new centres of growth is related to flexible specialisation as an alternative to mass production (Piore & Sabel, 1984). Behind this lay a recognition that the American model of mass production had not been universally embraced, especially in Japan, France, Italy and West Germany, and that hybrid structures evolved in these countries linked to older traditions of craft production that allowed them to adapt better to economic change. For example, the growing prosperity of the “Third Italy” area in the north-east of that country was cited in this context (Bianchini, 1991; Scott, 1988; Bagnasco, 1977). This represents a far more accommodating yet questioning view of the role of place than was the case in strategic management and particularly challenges the narrow American model of adversarial competition that has been so restrictive to management studies thinking on this issue.

Such work raised the profile of two considerations, firstly the role of history and path dependency in successful clusters and secondly the localisation or regionalisation of economic development, considerations that inform this study. Flexible specialisation based on community and institutional links to a craft production heritage could not explain the

remarkable development of technology clusters in the United States around the same time, however. The challenge to the American model could not easily be exported back.

The rise of technology clusters in the United States was examined by various scholars including Saxenian (1994). She compared the contrasting fortunes of two such phenomena, emphasising again the idea of regional sources of competitive advantage but putting the emphasis not on historical development but on a mix of relatively new institutional and cultural forces with industrial structure and corporate organisation. She showed how these forces were different - and combined differently - to produce a more effective response to managing technological development in Silicon Valley than around Route 128 near Boston. Effectively extending this, Storper (1995) identified the untraded interdependencies that lay behind these institutional and cultural forces that, in turn, produced organisational learning and co-ordination behind cluster formation.

As in strategic management, debate in economic geography and agglomeration theory became dominated by the issues around knowledge, for example Maskell (2001) and Malmberg and Maskell (2002), and the related subject of innovation with a strong focus on new technology companies (Florida, 2002). The pendulum has swung from factor cost optimisation through the importance of institutional and cultural factors to knowledge creation and transfer as being key to competitive advantage. In turn, the process of agglomeration that leads to the formation of clusters is seen, at least in economic geography, to work for knowledge as it may once have worked for natural resources or culture.

Underlying recent thinking is the concept of knowledge spill-overs, a dynamic externality that effectively revolves around improving productivity by learning from those around you (Glaeser, et al., 1992). This is widely accepted as being key to the development of the knowledge economy, particularly the innovation associated with high technology companies, and much of the study is now turning to how and where these spill-overs happen effectively. For example, work has been done comparing concentrations of firms in the same industry, the Marshall-Arrow-Romer externality (Glaeser et al., 1992; Porter, 1998), with concentrations of firms in different industries (Jacobs, 1969). Both types of cluster exhibit advantages but Maskell (2001), concludes that it is competition and co-operation amongst co-located firms within related industries that is central to knowledge creation, cluster development and competitive advantage. Globalisation, the relatively easy availability of everything everywhere, has made knowledge the rarest and most valuable resource and this is enhanced by, and in turn feeds into, cluster development through the gains from

interdependent development. He postulates that any advantage based on, say, transaction costs, would naturally be maximised by all firms consolidating into one. Knowledge creation and transfer is done more effectively through smaller, independent entities working in clusters. In a similar vein, Henry and Pinch (2000) stress the importance of labour churn in spreading knowledge amongst smaller, independent entities in the British Motor Sport Valley cluster in southern England.

There is certainly evidence of successful clusters growing from smaller firms held together by knowledge sharing and culture that goes back to, for example, Silicon Valley, Emilia Romagna in the Third Italy and Baden Württemberg in Germany (Piore & Sabel, 1984). It would appear, however, that this is not to the exclusion of consolidation. There has been, for example, a significant consolidation in Silicon Valley to giant technology companies in the last few years. The critical mass of technology development has moved into a few huge conglomerates around the world (Smith, 2018).

Patterns of consolidation to different forms can be seen closer to home in this study. Edinburgh has a long history of independent brewers going back to the eighteenth century. Over time these brewers consolidated into a global giant, Scottish and Newcastle plc, which in turn was absorbed into even bigger global enterprises beyond the city (Ritchie, 1999). A similar story is evident in Scottish banking, particularly the histories of Bank of Scotland, Royal Bank of Scotland and Standard Life (Martin, 2014; Perman, 2013; Moss, 2000; Checkland, 1975). This raises the possibility of life cycle effects in clustering and the PFR; that the PFR can work initially to assist cluster formation amongst smaller, perhaps mutually supportive companies and can help them grow and consolidate to become major international enterprises that then outgrow the original PFR. It would appear, though, that knowledge-based clusters of small firms are not the only driving forces of innovation and technology development and sources of the associated competitive advantage.

In addition to the Marshallian or Italianate clusters of small, locally-owned firms, Markusen (1996) identifies three additional possibilities, namely the *hub and spoke*, *satellite platform* and *state anchored* varieties. Bathelt, Malmberg and Maskell (2004) also highlighted the possibilities of knowledge creation and transfer, of both codified and tacit knowledge, not only within clusters but between clusters. They noted that the interactive learning behind cluster success could be stimulated by a combination of local buzz and global pipelines. They characterised global pipelines as connections with selected external partners. This aspect is also considered by Jenkins and Tallman in their study of Formula 1 motor racing (2012) which

built on the work referred to above by Henry & Pinch (2000) and looked at the role of multinationals in relation to transmitting knowledge between clusters and the benefits that might be derived from this. It would seem that huge conglomerates are trying to channel local buzz into global pipelines and vice versa.

As is evident from the above, the debate around how clusters are formed, the best conditions for their success and how long they survive is still very much alive and has been given new impetus in research about innovation and the knowledge economy. This debate, this interest in places at sub-national level reacting with firms to produce competitive advantage in cluster formation, has come from several bodies of thinking and has led to the identification of some of the possible catalysts for this positive reaction, for example heritage, institutions, social factors, culture, networking, untraded interdependencies and knowledge creation and transfer. Scholars have found it difficult, however, to find one theoretical framework to fit all the new growth areas far less to fit the new and the old industrial clusters.

Furthermore, these significant contributions to understanding the place-firm relationship still fall short in fully articulating a view from the firm. Although Saxenian (1996), for example, based her analysis on four companies and did reflect on company strategies and decisions she was seeking to explain what was happening in companies through the forces at work in and around the regions rather than to explain what was happening at the regional level through the forces at work in and around the companies. She identified very clearly the crucial role of networks that transcended companies but failed to show these could work both ways. As mentioned in the previous section on place and strategic management, firms in the north-east of the United States were more locked in to the US template for strategic management, reinforced by business schools and consultants, compared to businesses in Silicon Valley and the Third Italy. This gave opportunities for firms in these latter regions to adapt their strategies to business developments as they saw them unfold, akin to Mintzberg and crafting strategy (Mintzberg, 1987), rather than shape their strategies based on the naturalised forms that were perhaps unsuitable. Both strategic management and economic geography theoreticians seem to have been blinded to this possibility in the context of Silicon Valley. Yet Saxenian herself notes both that “spatial clustering alone does not create mutually beneficial interdependencies” (Saxenian, 1994, p. 161) and that “...regions are best served by policies that help companies to learn and respond quickly to changing conditions..” (Saxenian, 1994, p.166). Regions can provide an enabling environment but there is still the need for companies to develop the right strategies to prosper in such an environment; many do not, even in the most propitious conditions. A potentially very strong story about different

places and different corporate strategies took a back seat to an equally compelling story about apparently company neutral regional forces and regional performance.

Economic geography has not been as completely blind to the role of the firm as strategic management has been to the role of the place. Some economic geographers have sought to get inside the workings of firms in relation to phenomena like agglomeration. Oakey was one of the first to look at the impact of local, external factors on innovation in small businesses (Oakey, 1984). In 1988, he revisited this topic with several collaborators specifically to complement this view of the effects of external regional forces with a view from inside the businesses on the management of innovation (Oakey, et al., 1988). The authors studied 174 firms in Scotland, California and the South-East of England using telephone interviews and questionnaires and a more in-depth follow up involving 48 of these firms. They were looking, in particular, for regional differences in management strategy and intervention that contributed to business success. They found no strong evidence of such differences, however, and, beyond this, they concluded that the managers of the firms in question were not proactive anyway, but essentially reactive to the external macroeconomic forces already identified. They did at least consider the roles of firm strategy and management agency but concluded that, whilst agglomeration effects were important for the firms studied, these accrued less from local management design and more from entrepreneurs accepting a default position of starting businesses where they were last employed and where they knew agglomeration advantages already existed. The researchers did note, however, that some local managers were better at responding to the benefits of agglomeration than others. Thus, this study shows that economic geographers were not blind to the view of the firm; they just took a look and found there was not much there. Whilst this may be true for this particular study, small firms and the management of innovation, I would like to revisit this conclusion in this research.

A more recent example in economic geography of working from firm-based data can be seen in a study on the resilience of the Luxembourg specialised international financial centre (Walther, et al., 2011). This focused on a place-firm test bed very close in type to that used in this research and also used an approach very close to that used in this work. The methodology involved collecting and analysing data from 109 questionnaires and 22 interviews involving financial services businesses in Luxembourg. Rather like the work by Saxenian as mentioned however, this material was then used more to illustrate the workings of regional forces on firms rather than to build a picture from below, from the firms. It is about how the Luxembourg specialised international financial centre regional strategies

affect firms rather than about how firm strategies are advanced by locating in Luxembourg. There is a difference and the paper does recognise the importance of the relationships between firms in the financial sector and the Luxembourg authorities in determining the centre's success admitting that very little is known of such relationships and that more research is needed. This approach and the suggestion for further research do not appear to have been adopted more widely in economic geography however.

A similar approach is evident in a paper by Hall (2017) on the development of offshore renminbi markets in London. The methodology involved 30 semi-structured interviews with financial firms, recorded, transcribed and coded in a manner not dissimilar to that used in this research. The theme of the work is, again, about territorial practices and particularly the role of government with firm input being used to illustrate attractions of the London international finance centre. The focus is on relationships between territories, London and Hong Kong, and between respective authorities. This is a good, valid study but recognises that the important question around the relationships between the firms and the place, in particular the growing recognition that London's financial sector enjoys a privileged position within the UK political economy, often at the expense of other regions and industries, is not pursued.

These three studies come very close in intent and methodology to this work and show that this is an area ripe for further consideration but, in the main, this call has not been heeded in the wider realms of economic geography.

Looking at the wide range of work on clusters and agglomeration it is evident that there is a rush to generalise about regional forces behind how clusters are formed, how they work and how they relate to knowledge creation and transfer. In other words, there is a danger of putting too much emphasis on one aspect of cluster development at any one point in time. For example, the creation and exchange of information amongst small companies in specialist clusters is evidently an important feature but other factors are also important including the fortunes and the strategies of the individual companies. Some outgrow the clusters, others disappear. Some clusters gain strength from being linked to others through subsidiaries of multinational companies, echoing some of the thinking around FDI mentioned previously, (Dunning, 1998; Cantwell, 2009). Clusters are continually changing in nature reflecting continually changing relationships between firms and places which, in turn, reflect the continual evolution of both the firms and the places.

Markusen (1996) does talk about the relationships of different types of firms in clusters and of a “sticky mix” of factors, including corporate strategy, and this comes closest to the reality from the firm’s point of view. Place decisions are likely to be very much affected by a variety of forces that change over time and are affected by both internal and external forces. The PFR governing a firms’ strategic considerations about where to site business activities is a highly complex blend.

Agglomeration theory, cluster formation, the sub-national focus, the importance of knowledge creation and transfer and the ways different catalysts might work in the mix all certainly open up rich new avenues for investigation in the PFR that are considered in the new framework for analysis alongside factors like managerial agency in firms and more traditional determinants like infrastructure and logistics. The weightings of the different influences will change, and some factors may disappear and reappear through time or across different locations, industries and firms but it is important to keep the broader picture in view.

There are two significant extensions of agglomeration theory in economic geography that are worthy of further consideration in analysing the PFR. Firstly, there is the work of Porter, mentioned above in relation to strategic management, who extended his interest in competitive advantage from firms to countries (Porter, 1998) and produced a model that suggested a possible bridge between strategic management and economic geography. As potentially the most relevant work for this study this is discussed separately in the following section with a review of criticisms from various sources and a reflection on the theory’s enduring appeal.

Secondly there is the interest shown in the apparent paradox of the ever-stronger growth in cities and city-region clusters despite the flattening of the world through globalisation (Friedman, 2005). The work of Glaeser, Sassen, Florida, Storper and others is discussed in this context.

2.3 Porter, Clusters and Competitive Advantage

The work by Porter on national competitive advantage (Porter, 1998), would appear to get to the heart of the PFR by taking strategic management expertise into a major area of work in economic geography, namely what drives successful economic agglomerations or clusters. The approach taken, however, does not so much reconcile the workings of the successful firm with the workings of the successful place as draw out the apparent lack of connection between what makes a successful firm and what makes a successful nation. Porter notes that

“firms not nations compete”, (Porter, 1998, p.33) and that the ways that firms create and sustain competitive advantage provide the foundation for national competitive advantage but fails to prove the connection. There are contradictions and shortcomings evident in this, but the work is particularly fertile in exploring issues that do seem to be relevant in the PFR, for example the important inter-relationships across firms, related and supporting industries, factor conditions, market forces and the roles of government and pure chance.

2.3.1 The competitive advantage of nations

Based on his work on corporate strategy and competitive advantage Porter was invited to join President Ronald Reagan's Commission on Industrial Competitiveness in 1985 with a view to applying the insights around corporate success to industry at the national level; effectively to look at how countries could compete like companies. This led him to write his influential book *The Competitive Advantage of Nations* (Porter, 1998) which sought to adapt his thinking on corporate competitive advantage to countries. This has become a bedrock text linking place and strategic management and it has generated a plethora of commentary and further research, for example in a 1993 Special Edition of *Management International Review* devoted just to the subject of Extensions of the Porter Diamond Framework and in a book dedicated to reviewing his ideas as recently as 2011 (Huggins & Izushi, 2011).

In this study Porter outlined the concept of business clusters developing as a result of four major determinants interacting in a diamond pattern and incorporating influences from two subsidiary determinants as illustrated in Figure 2-1 below.

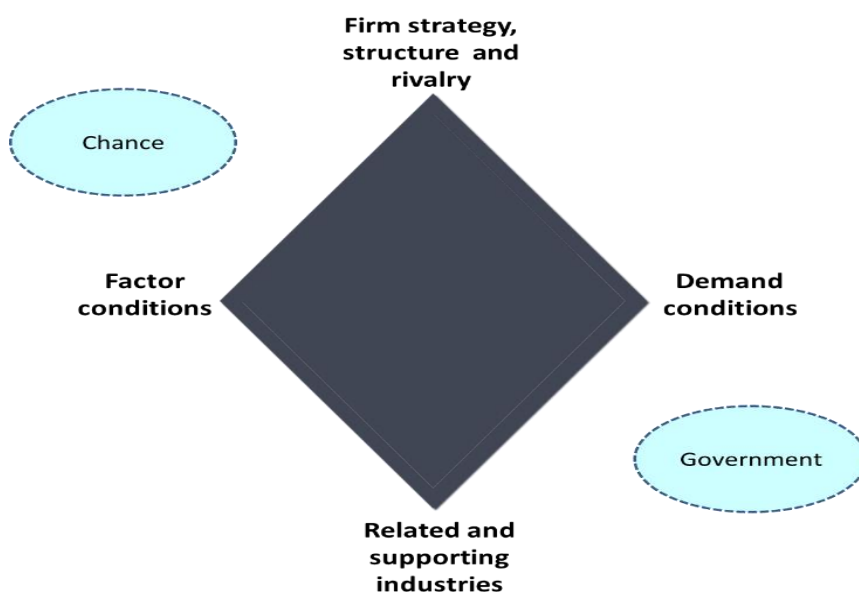


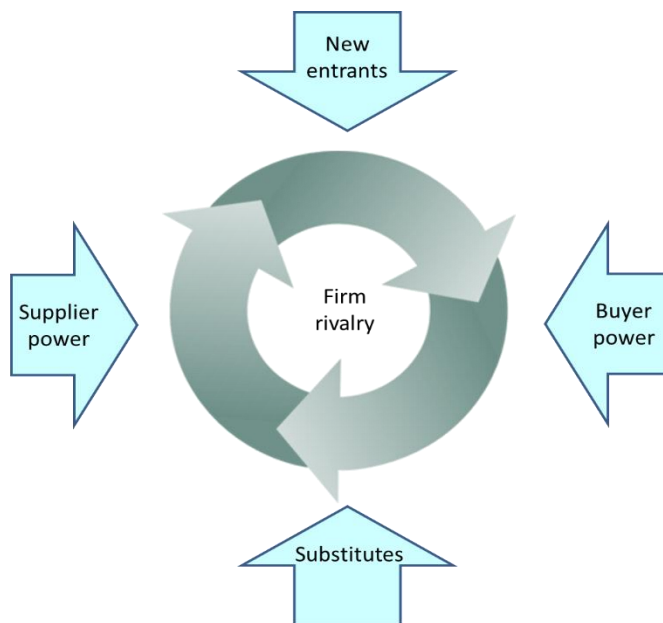
Figure 2-1 Porter's diamond; the national model
(Source: Porter 1998)

Porter's research suggested that a dynamic and mutually reinforcing interplay across these determinants supported the development of clusters of successful, interconnected companies. Managing this would lead to countries, and industries within countries, achieving competitive advantage over other countries in much the same way that companies could achieve competitive advantage over other companies by managing their positioning in relation to the five forces (Porter, 1979) as discussed already under strategic management.

Porter appears to be marrying a view of strategic management with an economic geography approach to the centrality of place, going beneath the macroeconomic environmental scanning already used in the former discipline to examine inter-relationships at a microeconomic level. The marriage is not without its drawbacks, however, and whilst contributing to a framework for analysis relevant for consideration in this research, it does not convincingly represent either discipline in a robust union.

2.3.2 Five forces versus the Diamond

One of the most striking anomalies of this work is that the strategies recommended by Porter for companies to achieve individual success in an industry appear to be quite at variance with the strategies he recommends for companies to achieve success as part of a successful industry in a successful nation or region. Put simply, the former requires battling most of those around you in a fight for survival, the strategic management cause célèbre; the latter requires constructive rivalry and co-operation with most of those around you, the economic geography core principle in agglomeration. Porter (1998) devotes a chapter to outlining how firms must position themselves to be competitive in their industry environment in terms of his five forces, competitive positioning within the industry and value chain optimisation. He notes that "Nations succeed where country circumstances support the pursuit of the proper strategy for a particular industry or segment" (Porter, 1998, p.67). He then spends most of the book outlining how countries can support the development of an industry environment that is conducive to creating these circumstances for industry competitive advantage and he notes "The ways that firms create and sustain competitive advantage in global industries provide the necessary foundation for understanding the role of the home nation in the process," (Porter, 1998, p.69). This connection is not borne out when comparing his two models of competitive advantage. Figure 2-2 shows Porter's five forces, his key analytical tool in corporate strategy.



*Figure 2-2 Porter's five forces the industry model
(Source: Porter 1979)*

Looking at the prescriptions behind the five forces and those behind the diamond determinants in relation to the key actors makes this anomaly clear as summarised in Table 2-1 following.

Table 2-1 Comparing Porter's five forces and dynamic diamond

Factor (5 forces/diamond)	5 Forces (industry model)	Diamond (national model)
Suppliers/Related and Supporting Industries	Firms would like to limit the power of suppliers and thus reduce costs and make suppliers more compliant with the company's demands. Weak suppliers are good for a firm's prospects of competitive advantage.	The competitive advantage of a nation or region requires a strong role for suppliers and supporting services where they are key to knowledge transfer and, in themselves, can become centres of international competitive advantage. They are integral to the collective competitiveness of industry clusters, not as subservient, isolated dependencies that need to be continually put under pressure to produce the best deal.
Buyers/Demand Conditions	The preference is for weak buyer power; strong buyers can put downward pressure on margins and make greater demands on companies.	A strong and demanding local market is crucial in driving firms to greater efficiency, innovation and productivity that can then give greater international

		competitive advantage. The dynamic diamond favours powerful, sophisticated buyers.
New Entrants/ Firm Strategy, Structure and Rivalry	New entrants are a threat. Existing, successful companies generally would like to see barriers to stop them eating into their market share and profits. Obviously, a firm that is itself a new entrant will have a different view, but it is likely to change to a more protectionist stance once in “the club”.	New entrants are a very important source of growth in wealth and in innovation, particularly through spin-outs. New blood is essential to on-going prosperity.
Substitution/Firm Strategy, Structure and Rivalry	Substitution is generally seen as a threat to existing successful businesses in the industry model. Whilst some companies may see the benefits of Schumpeterian style creative destruction (Schumpeter, 1942), they will seek to control this whilst protecting established products and markets.	Substitution is a source of welcome innovation and evolution to a healthy cluster in the national model. The demise of some firms is seen as inevitable and both new entrants and substitution are essential for the cluster to thrive beyond the life cycle of any one company.
Firm Rivalry/ Firm Strategy, Structure and Rivalry	Whilst some firms may recognise the advantages of rivalry in spurring them on to achieving greater things, very few would encourage increased competition. In fact, the grounding for most corporate strategies in the industry model is to fight and conquer, to benefit your company specifically at the expense of rivals, to reckon with survival of the fittest. Competition is there to be extinguished.	The national model envisages a combination of constructive rivalry and co-operation with benefits accruing from firms learning from each others’ successes and from striving to outdo each other in the cluster. Competition is welcomed to drive one on to greater achievement.
Factor conditions	Firms will seek to limit others’ access to essential factors of production, from natural resources to labour to knowledge, in order to secure their own advantages, even if they have more than enough for their own needs.	The national model is based on maximising resource utilisation through encouraging access by as many as possible to foster greater productivity, efficiency and innovation.

The Role of Government	<p>Although most firms pay lip service to government non-intervention and free market conditions, it is often business that is most interested in greater government involvement. This would not be, of course, to limit firms' own freedom of action and their drive towards monopolistic positions but more often to create barriers to entry against newcomers and to give subsidies and tax incentives in the face of real or apparent unfair competition from elsewhere. Whilst Porter does not see government as a significant force in achieving competitive advantage he does cite government influence in this context in his 1979 article.</p> <p>Most firms want government involvement so long as it is of the "right sort", as protection against the five forces of the industry model. This suggests a more interventionist and protectionist approach than that in the national model.</p>	Porter advocates limited intervention beyond ensuring the necessary macroeconomic framework, though with a strong emphasis on education and creating an enabling environment for innovation.
------------------------	--	--

(Source: developed by the author)

Prima facie both models make sense when considered individually but they are difficult to reconcile when put together. The diamond model does not, therefore, give a satisfactory basis to explain the interaction of corporate strategic management and successful places. What Porter recommends companies do for corporate success appears to be at odds with what he recommends they do for cluster success. The potentially irreconcilable differences become clear when the PFR is considered from the point of view of the individual firm. Foss (2011) notes the theoretical inconsistencies in Porter's work and attributes this partly to his lack of an adequate theory of the firm, a failure to reconcile the basics.

These inconsistencies are very important when it comes to the relationship between place and strategic management. On the one hand, the relationship with place is seen as of little relevance to company success in strategic management theory, a position essentially endorsed by Porter's seminal works on corporate strategy and competitive advantage. On

the other hand, when Porter, one of the most prominent exponents of the strategic management view, looks at national economic success through the lens of strategic management, the role of firms is significant but fraught with contradictions. Yet it is very difficult to conceive of economically successful nations, or at least places, without successful firms or many successful firms outside economically successful places. It is counter-intuitive to suggest successful firms thrive in unsuccessful places and vice-versa which is what the contradictions in the models seem to imply.

Despite these apparent shortcomings, Porter's work on clusters usefully highlights some important, basic points, including that some places are clearly more economically successful than others; that places in themselves do not produce the wealth and that this comes from economic activities in the places which, in a free market system, are undertaken primarily by businesses, by companies. Porter memorably notes that "prosperity is a (nation's) choice" (Porter, 1998, p.xxii) and he has certainly made inroads into investigating the possible links between what makes successful companies and what makes successful places. He has shown that these connections might be quite complex and that they interact in a dynamic framework and that they might be generalisable. Perhaps above all, he has shown that there is an inherent tension between the pure, rational, isolationist corporate strategy a company might follow and a real-world corporate strategy that makes allowance for collective and long-term success within a community, linked to a place; success that requires compromises to reach a greater, overall, longer term benefit. This is a view supported by the results of this research.

Porter's analysis and his frameworks for interpreting data have proved very useful but they do not give tenable conclusions about the PFR for successful firms and successful places and they do not bridge the gap between the strategic management view and the economic geography view, they tend to represent both sides and embed the differences.

2.3.3 Nations and regions, industries and firms

Beyond the internal contradictions in Porter's work, a second group of reservations is linked to the units of analysis, namely nations and industries. Porter talks about the applicability of his principles to regions and cities as well as nations, but he clings to the greater importance of national characteristics. As is evident from the preceding section (2.2), cluster studies in economic geography have moved almost entirely to the sub national regional or city level.

Porter also talks about firms but focuses on industries. His work concentrates on nations and industries as units of analysis and he does this in a very restrictive way, in considering only

home-based firms within the industries and in considering only their FDI and exports as being important competitive measures of productivity. These points have attracted considerable criticism.

Paul Krugman (1994) decried the whole idea of national competitiveness as being misleading and mistaken and potentially dangerous in encouraging the misallocation of resources. He supports the position that nations are not the same as companies and cannot and do not act like companies. This is undoubtedly true, although in making this comparison he is largely accepting a view of how companies act that is close to the industry model, Porter's five forces, described above; the model of a general commanding an army fighting ruthlessly and single-mindedly in a battle for market share. History suggests that countries cannot exist in a state of perpetual enmity with those around them and alliances are formed, and co-operation encouraged alongside, or in place of, aggression and competition. It is one of the features of this research to test whether this is not also a more appropriate model for companies as well; that they do not exist in perpetual war with all around but, through the PFR in particular, they balance competition with co-operation.

Companies and countries, or at least places, might have more in common than suggested but Krugman is right that nations are not the appropriate unit of analysis for examining the PFR. Besides the solid assertion that countries cannot act like firms because they have different objectives and, generally, more constrained executive power there is also the further point that most countries are less cohesive than companies. There are significant variations in economic development within most nations; there are obviously some places that are much more successful than others **within** the national borders of all but the smallest nations, countries like the United States, India, China or the United Kingdom. It would be misleading and unproductive to examine the PFR on the basis of nations as the places in question. As Marshall (1st ed. 1890) noted, firms are much more localised, in industrial districts, and the disparities between rich and poor areas are often as great or greater within nations as they are between nations. Porter himself uses Italy as a case study without noting the massive difference between the north and the south of that country in terms of innovation and economic development.

This is not to say that national characteristics are not important. Interestingly, although comparing nations, Porter explicitly ignores macroeconomic differences, but when a firm makes a place decision it must take into account both macroeconomic and microeconomic considerations. Analysis that looks at the PFR along only one axis will inevitably fall short. In

line with developments in economic geography, the region or city-region level would appear to be more appropriate in terms of looking at the PFR but this should also take into account the significant impact of national political, economic, legal and other factors.

It should also embrace wider international links. More attention needs to be given to globalisation and MNEs and to the ever more complex networks of international connections between prosperous places and within successful companies. Porter's national focus falls down as being both too broad and too narrow; it sees countries as homogeneous units and self-contained islands with success built only on home-based industries. Both Dunning, "To suggest that the competitive position of MNEs...rests only on their access to the diamond of competitive advantage of their home countries is ludicrous," (Dunning 1993, p. 10) and Davies and Ellis, "The argument that successful companies draw solely or even largely on their home diamond is not supported at the conceptual level" (Davies and Ellis, 2000, p.15) reach quite categorical conclusions refuting his stance. These authors strongly support the position that the economic success of a place may be as much, or even more, down to its ability to attract the operations of businesses based elsewhere as it is also clear that a firm's success, and in turn the success of a place, depend on all its businesses, local and foreign. Dunning (1993) also notes that, as with most of the strategic management literature already discussed, Porter takes a very American ethnocentric view of the world.

Whilst Davies & Ellis (2000) pinpointed the drawbacks of Porter's too narrow view, Martin & Sunley presented a view from economic geography highlighting the lack of delineation, contending that "There is no agreed method for identifying and mapping clusters, either in terms of the key variables that should be measured or the procedures by which the geographical boundaries of clusters should be determined" (Martin & Sunley, 2003, p.19). This does not seem to have prevented the growth in cluster studies into which considerable resource has been poured at national, regional and city level (Porter, 2000). In a book dedicated to his work (2011) Huggins and Izushi, the editors, note that Porter has worked with the OECD and the World Bank and with local and national governments and development agencies in the United States, the United Kingdom, France, Germany, the Netherlands and New Zealand. His consultancy has been sought throughout the developing world and even inspired the Latin American Center for Competitiveness and Sustainable Development based in Costa Rica. The criticism that clusters can, effectively, be whatever you want them to be, their elasticity as Martin and Sunley note (2011), seems to have contributed to the wide and enduring popularity of the model.

In an update at the turn of the century, Porter (Porter, 2000) seemed to accept the criticism of the narrowness of his view on what contributed to national success and to agree that his model would need adjusting accordingly. By taking the criticisms on board, however, without fundamentally reappraising the appropriateness of the workings of the diamond the overall structure has been made weaker. In an attempt to be everything to everyone the work has moved closer to the view implicit in Martin and Sunley (2003) that it is in danger of becoming nothing to anyone.

Porter also confines his analysis to the industry level. Again, this would appear to be an unnecessarily large aggregation. Industries are composed of firms and within any industry there will be some firms performing better than others, some giving more and some taking less, all different. As mentioned above, Porter identifies firms as the units of competition rather than nations and he might have extended this to industries as well. Industries only compete to the extent that they represent clusters of successful firms competing. Firms may co-operate with other firms or with governments or with other institutions and give a semblance of unity of purpose but, outside of command economies, industries do not have decision making capabilities, industries do not have homogeneity in strategy. Industries are made up of firms sharing similarities but also exhibiting differences. The success of industries and of clusters is dependent on competition and collaboration at the firm level.

The basis for this research is city-regions and firms, but national and industry-specific factors have been considered as well as the increasing linkages of both places and firms to influential international connections, the global and local dimensions of exchanging both tacit and codified knowledge as identified by Bathelt, Malmberg and Maskell (2004).

2.3.4 Limitations in method and definition

There has also been quite widespread questioning of Porter's methodology and his manipulation of data. In their "final judgement" on Porter's model, Davies & Ellis (2000) draw attention to lack of clarity in measures of success between export market share and productivity, to methodological sampling issues, to empty logic, to ex-post rationalisation, to confusion between comparative and competitive advantage and to the lack of supportive empirical studies. From a strategic management point of view, they labelled the national model "hopelessly rich and gloriously wrong" (Davies and Ellis, 2000, p.26).

Martin and Sunley (2003) looked at the work as economic geographers and were similarly critical. They called into question the validity of the model itself and the whole concept of clusters as outlined. They too decried the lack of empirical evidence behind the model and

noted that the implication that clusters have no spatial or industry boundaries rendered it meaningless. They also noted that whilst empirical evidence may have established the possible association between high growth areas and industrial geographical concentrations, it has not so far proved there is a causal effect.

This lack of a causal effect is also taken up by Simmie (2006) who makes a case that exports are the key to competitiveness, that innovation systems are the key to export success and that, if anything, clusters are the products of innovation systems rather than the other way about. He notes the difference between Porter's cluster properties and traditional agglomeration economies, like labour availability and transport links, and suggests the latter give a better explanation for firms' co-location than interlinkages and co-operation. He contends that economic success derives from firms coming together in nationally and internationally connected city regional hot spots that provide the basis for innovation systems.

2.3.5 Enduring success

If nothing else, Porter succeeded in bringing the two disciplines of strategic management and economic geography together, even if it was only to unite in highlighting his work's perceived shortcomings. The above criticism notwithstanding, Porter has achieved great success as an academic, writer and consultant and his work is cited in most management education courses and strategic management and economic geography textbooks.

His national model has been widely applied across the world, with countless suggestions for extension and modification that would tend to attest to its fundamental applicability. For example, there have been proposals for multiple diamond models for New Zealand (Cartwright, 1993) and Canada (Rugman & D'Cruz, 1993) as being more appropriate for relatively small, open, export-led economies, and even for a dual double diamond or nine factor model (Cho & Moon, 2013). With a bit of imagination, the diamond has been applied to explain competitiveness in Coventry in England (Healey & Dunham, 1994), for the principal industries of Greece (Konsolas, 2018), for Indian SMEs in Himachal Pradesh (Kharub & Sharma, 2017) and in the developing market context and state controlled industries of Turkey (Öz, 2002).

Support has come from many other authors using a pick and mix approach to elements of the model, showing the appropriateness of certain elements to a certain type of cluster in specific national, conditions. This leaves one wondering whether Porter's work is being further validated or undermined for example, with Grein & Craig (1996), O'Shaughnessy

(1996) and Takala, Shylina & Tilabi (2014). In each case proof is given of the partial applicability of the model, with some modification, implicitly denying the applicability of large parts of the supposedly interconnected structure.

The Competitive Advantage of Nations is a big, wide-ranging tome; it is over 850 pages long. If examined closely, there are references to a host of factors, for example the importance of culture, education, geography, history and politics, where no argument is really developed, and which carry implications contrary to the main themes. There is something there for everyone, which makes the book meaningful for every situation and thereby risks being true to none as noted by Martin & Sunley (2003). For example, there is a chapter on service industries, but the model is essentially built around manufacturing. There are references to the importance of culture and history that are similarly lost in the final analysis and much of what is said about the importance and role of clusters highlights localisation issues, but this is never reconciled with the over-riding focus on national competitiveness. Davies and Ellis (2000) summarise a range of published reviews of the work which are accordingly quite widely divergent. For example, reviewers have found support for government intervention as well as criticism of government intervention. There is so much material that it is possible to find support for mutually contradictory positions.

According to Martin and Sunley (2003) the lasting market appeal is down to several converging factors, primarily its simplicity and practicality, its emphasis on competitive advantage and its looseness of definition, as already mentioned. These views are echoed more recently by Ketels (2011). It can be seen that the model is empowering; to company managers and those in charge of national and regional development alike it offers a theoretical justification for intervention to meet policy promises on productivity, innovation and growth. Similarly, Rugman and D'Cruz noted that the determinants in Porter's diamond were not new but that his main contribution was "to bring them together in a manner useful for business and government" (Rugman and D'Cruz, 1993, p.20).

Whilst not on a par with the industry that grew up around strategic management, the work around clusters and Porter's diamond has become a mini industry that reinforces the "brand" despite deficiencies. Whilst there may be discontinuities and contradictions between Porter's work on the competitive strategy of firms and the competitive strategy of nations both bodies of work are well positioned for the US based management/academia/consultancy industry referred to earlier. This should not be easily discounted and partly explains publications like the MIR special edition (Cartwright, et al.,

1993) which, despite the considerable volume of criticism, devoted itself to engineering the model into positions where it would fit different circumstances rather than sentencing it to be unfit. Or, as Davies & Ellis suggest (2000, p.21), referring to Yetton et al (1992), “when the facts are not in line with the theory, it is the facts which must be about to change”. The Table 2-2 below summarises some of these criticisms of Porter’s diamond model.

Table 2-2 Criticisms of Porter's diamond cluster theory

Criticism	Source
Methodology <ul style="list-style-type: none"> • Confusion in measures of success between exports and productivity. • Confusion between comparative and competitive advantage. • Sampling issues. • Ex-post rationalisation. • Ill-defined concepts; selective choice and interpretation of data. 	Davies & Ellis, 2000 Grant, 2011
Internal contradictions <ul style="list-style-type: none"> • The “five forces” and “diamond” models give contradictory roles for firms in the pursuit of competitive advantage. • Countries cannot act like companies. • Inconsistent views on role of government. 	This research Foss, 2011 Krugman, 1994 Davies & Ellis, 2000
Omissions <ul style="list-style-type: none"> • Importance of management agency. • Importance of culture. • Importance of industrial policy. • Importance of role of government. 	Strategic management O’Shaughnessy, 1996 Davies & Ellis, 2000
Over-simplified/generalised <ul style="list-style-type: none"> • Describes associations but not causality. • Gives orientation without explaining complexity. • Lacks delineation. Everything to everyone and therefore nothing to anyone. 	Martin & Sunley, 2003 Simmie, 2006 O’Shaughnessy, 1996 Martin & Sunley, 2003
Limitations <ul style="list-style-type: none"> • Ethnocentric US view of the world. • Lack of empirical support. • Concentration only on home-based firms. 	Dunning, 1993 Davies & Ellis, 2000 Martin & Sunley, 2003 Davies & Ellis, 2000 Dunning, 1993
Unit of analysis <ul style="list-style-type: none"> • Countries are not the appropriate unit of analysis. • Industries are not the appropriate unit of analysis. 	Economic geography This research

(Source: developed by the author)

At a time when there is increasing doubt about the validity of economic models to explain what exactly is happening in the economy and in business, it would be inappropriate to

ignore this enduring appeal and the very human reasons behind it. Despite the extensive criticism of the model's failings and of inadequacies in the methodology as above, there is a strong feeling in both academia and the wider worlds of business and economic development that it is relevant, that the framework and the determinants are valid. They do not necessarily work in the way originally described and there are myriad gaps and shortcomings requiring adjustments and adaptations but there is a basis for analysis there, a tool to work with.

2.3.6 Implications for this research

For this research, I have taken a selective approach to Porter's cluster model akin to several others. In terms of getting to the heart of the relationship between successful firms and successful places there appears to be no justification for reducing the analysis only to home-based firms and only to exports. In principle, all firms are considered together and both domestic and foreign business. In establishing common ground between businesses and the places where they are located, competitiveness and competitive advantage are also considered less useful than overall economic productivity, in this case as measured by GVA (Gross Value Added). Porter himself confuses this issue of success (Porter, 2000) in defining clusters in terms of competitive advantage in a circular manner that, in turn, defines competitive advantage in terms of clusters.

Furthermore, the region or city-region is a more appropriate unit of analysis than the nation, which often disguises significant internal differences and inconsistencies, but unlike the diamond, both macroeconomic and microeconomic factors are taken onto account as both are relevant to a firm and the PFR.

Key aspects from the work that have been generally accepted and should be incorporated going forward include the recognition that the relationship between place and firm is complex and consists of many determinants interacting in different ways, in different places, at different times and in different situations, a sticky mix. It is in a constant state of flux, but this does not mean, however, that the key determinants cannot be identified and tracked within a framework for analysis. Within this, the key determinants identified in the diamond are still worth considering although they cannot be considered exclusive nor dominant. The range needs to be extended, particularly in areas like culture and history, networks and legacy. Last but by no means least, the comparison of Porter's pure corporate strategy and an idea of a real-world corporate strategy has revealed that there is a probable tension in the PFR that has largely been overlooked by strategic management and economic geography theorists. Table 2-3 below summarises this "pick and mix" from Porter's cluster work.

Table 2-3 Summary of overlaps and omissions from Porter

Porter	This research
Disagree	
National focus	Regional focus
Microeconomics only	Microeconomics and macroeconomics
Exports as measure of success	Productivity as measure of success
Industries	Firms
Home based only	All business
Agree	
Complex interaction of different factors	
Roles for government, rivals, suppliers and other supporting businesses	
Add	
Increased roles for culture, legacy, institutions, networks, quality of life	

(Source: developed by the author)

The aim of this research is to look again at this place-firm relationship through a new framework within which there is a complex interplay of forces and where the determinants behind these forces can be identified and their relevance measured on a firm by firm basis for particular places at particular times.

2.4 Knowledge-Based City Growth

Continuing on the theme of cluster development, which is central to some of the most visibly successful examples of place-firm relationships, particular attention has been paid to the importance of knowledge creation and transfer and the apparent connections between this and the growth of cities and city-regions.

2.4.1 Technology and the knowledge economy

The world economy has seen remarkable expansion over the last fifty years with a five-fold increase in GDP in real terms (World Bank, 2017). There has also been a significant shift in the industrial profile. Table 2-4 below shows the top ten firms in the United States, by market value, in 1967 and in 2017 (Kauflin, 2017). This underlines the remarkable rise, size and dominance of high technology and financial services companies that is a world trend, albeit with national and regional variations.

Table 2-4 Top 10 US companies, 1967 v 2017

	1967		2017	
	Company	Industry	Company	Industry
1	IBM	Technology	Apple	Technology
2	AT&T	Telecomms	Alphabet	Technology
3	Eastman Kodak	Film	Microsoft	Technology
4	General Motors	Automotive	Amazon	Technology
5	Standard Oil of NJ	Oil & Gas	Berkshire Hathaway	Conglomerate
6	Texaco	Oil & Gas	Facebook	Technology
7	Sears, Roebuck	Retail	Johnson & Johnson	Medical
8	General Electric	Conglomerate	Exxon Mobil	Oil & Gas
9	Polaroid	Film	JP Morgan Chase	Financial Services
10	Gulf Oil	Oil & Gas	Wells Fargo & Co	Financial Services

(Source: Kauflin, 2017)

This shift has been accompanied by a re-evaluation of what makes companies successful and of how place might contribute to this success. Success in high technology and finance is not about natural resources in the ground or transport costs or production techniques, it is largely about innovation and brain power, about talented people in what has come to be known as the knowledge economy (Leibold, et al., 2005).

People are, at least theoretically, highly mobile and knowledge can be created and transferred independently of spatial constraints via the astounding advances in information technology and communication that have been such key features in the growth of these industries. Thomas Friedman's book *The World is Flat* (2005) celebrates the benefits of this freedom from place and distance. He reports that technological and political progress are working to iron out differences across the world, to facilitate globalisation and equalise commercial opportunities. Geographic differences are becoming less relevant.

2.4.2 Talent clusters

Contrary to this view, however, it has also been evident that there has been an increasing concentration of wealth and population in certain cities which have grown disproportionately in size and importance. Differences between countries in terms of, for

example, per capita income may be reducing but differences within countries are often increasing in a polarisation comprising rich urban centres on the one side and relatively poor, peripheral and rural areas on the other.

Several authors have linked this growth to a new type of agglomeration, agglomeration on the basis of knowledge (Maskell, 2001) which translates into clusters of knowledgeable people, in fact not just knowledgeable people but talented people, people who can apply their knowledge. Firms, especially in the technology and services sectors, are drawn to certain places because of the availability of the people with the knowledge they need for their companies to prosper, the institutional fit (Malmberg & Maskell, 2002). This in turn attracts other firms to service these firms and firms who service the employees and families of the service firms and so on. This cascade around the knowledge economy elevates the role of place and begs the fundamental question in relation to city growth as to why talented people have been attracted in the first place, what are “the magnetic qualities of place” (Peck, 2005, p.744).

Prima facie this attraction of talent to cities may seem counter-intuitive. If you can work from anywhere using modern communication techniques why live somewhere that is crowded, expensive, possibly polluted and possibly far from home? This phenomenon presents a new dimension to the PFR. Company place decisions are being made based on the availability of talent; companies are moving to where the people are rather than people moving to where the companies are (Florida, 2012). And where the people are, the better educated, the innovators and technical pioneers, is dictated by new forces of agglomeration creating knowledge or talent clusters.

Saxenian, as already mentioned, looked at the contrasting fortunes of two technology clusters, Silicon Valley and Route 128 (Saxenian, 1994) and highlighted the importance of place to the relative success of the former through the effect of local networking. In a similar manner, Glaeser et al. (1992) had already identified the tight geographical space of a city, the cross-fertilisation and the inevitably greater spill-overs of knowledge from peoples' regular proximity, as a possible spur to industry development through heightening both competition and co-operation. Glaeser built on this in his book *The Triumph of the City* (2011) and noting that, in this age where human capital was the most important resource for economic development, cities served to increase this. They serve to create a multiplier effect because they are centres for intensive interaction, the spread of ideas and improved productivity. He built on the work of Saxenian in culture and networks and on that of Storper

on untraded interdependencies (Storper, 1995) and offered this as an explanation for the apparent paradox between Friedman's flat world and the reality of ever greater concentration of wealth in cities.

Florida, writing in 2002 and revisiting the subject in 2012, developed the idea of a new creative class to define the people who were at the heart of this new and accelerated urban growth. He tried to extend Glaeser's (2011) ideas about the importance of human capital into a more nuanced theory of creative capital that put even greater emphasis on the lifestyle and recreational factors behind the attractiveness of cities. In his view, proximity and networking possibilities in an urban environment are not enough; there needs to be cultural affinity built around tolerance, technology and talent, characterised by abstract factors like diversity, authenticity and identity. He also noted, most importantly, the need for a thick labour market; firms are attracted to concentrations of talent and creative people need opportunities to change jobs. In this sense, the attractiveness of cities becomes a self-sustaining virtuous circle (Florida, 2002; 2012).

Both Glaeser and Florida are good at describing the phenomenon of city growth but are less convincing in their explanations of cause and effect. Their definitions of who is driving the growth are rather self-referential and circular inasmuch as the traits and tastes of those who are doing well define the traits and tastes that are preconditions to doing well. It could be argued that those doing well are those who have always done well; the well-educated from comfortable backgrounds and with good connections, perhaps just the usual élites in more up-to-date packaging (Peck, 2005). Florida's creatives, for example, include lawyers, financiers and health specialists, people from the traditional élite who are usually valued not so much for being creative as for being professional, meticulous and reliable. Krätke (2010) notes, even less charitably, that far from being heroes of the piece Florida's creatives include a dealer class in finance and real estate of short term, disreputable traders who actually constitute a threat to economic development.

Turok (2004) also cautions against putting too much emphasis on local business networking and the significance of clusters and reminds us that city regions get competitive advantage from size and diversity and that a broader view of the relationship between place and competitive advantage is required that considers mechanisms of cumulative causation, of path dependency, chance, infrastructure and other more traditional factors.

Whilst clearly agreeing on the connections between growth in the knowledge economy and growth in cities, questions are also raised by Scott (2014) and Storper (Storper & Scott, 2009)

about the simplicity of Florida's approach. There is the danger identified by Grey & Wilmott (2005) that what appears to be new thinking is just a recycled version of the thinking of élite groups newly institutionalised or, as Knights and Morgan might earlier have suggested, a new turn in strategic discourse aimed at preserving privilege and perpetuating inequality (Knights & Morgan, 1991). Less cynically, it may be that Florida in particular is presenting a world as many would like to see it, an idealised world where you can be well-educated and well-off and help mankind at the same time by stimulating economic development and promoting humanitarian values.

Peck (2005) summarises various criticisms of Florida, including by Malanga (2004) and Marcuse (2003) for example, that suggest his arguments may be circular and self-serving; that the solutions for success not only foresee, implausibly, that creative environments can be artificially created but that, even more implausibly, they can be created by government officials; and that they require a class normally associated with being anti-capitalist to become the drivers of economic growth as measured, for example in that most materialist middle class metric, rising house prices. But Peck also recognises and addresses the great popularity and influence of the work. As with Porter and clusters, Florida (2002; 2012) has struck a chord with city developers in particular by providing a relatively straightforward, fast and empowering tool that perfectly fits a neo-liberal predisposition. As with Porter's diamond, the thinking has not only proved immensely attractive to many, but it has prompted significant policy initiatives in the United States and overseas.

Florida's perspective may be self-serving and short-sighted in differentiating cause and effect but one thing that does come across strongly is the idea of cities as centres for opportunities; opportunities for employment, for entertainment, for consumption. This has been true for centuries but there is something to be said for the notion that employees are now more in control than employers when it comes to the place decision and, therefore, their personal aspirations are more important in the PFR than a firm's strategic priorities. Unfortunately, there is little analysis from the individual firm's point of view. What is clear, though, is the snowball effect. Cities that attract, or create, talent attract firms seeking talent which attract more talent and so on whilst along the way the cities will reflect the needs and priorities of those driving economic growth, arguably also influencing the attractiveness of the place to others from a similar mould. The points made by Glaeser and Florida about a shift towards talent attracting companies rather than vice versa and about the virtuous circle of a thick labour pool survive scrutiny.

Sassen builds on reflections by Storper and Scott (2009) with a more prosaic approach to explaining the concentration of economic activity in major cities (Sassen, 2012). Rather eschewing the influences of local networking, knowledge exchange and culture she notes that the new dominance of global cities has gone hand in hand with the new dominance of financial services in economic affairs. These services have become ever more complex and are reliant on highly specialised and well remunerated talent pools that have become control centres, not just for capital flow but also for trade and for sponsoring technical innovation and developments. These financial centres have replaced mines, factories and more traditional industries at the heart of the world economy and have developed their own specialisms linked in a global network independent of national identities.

This rather strips away the lifestyle factors, or at least places them firmly as effects rather than causes and harks back almost to the tenets of classical economic theory and the emphasis on specialisation and the division of labour and is no less valid for that. It is a rather narrow approach, however, and it does not explain the PFR of the majority of economic activity which takes place outside the financial districts of a dozen global cities. Neither does it take the analysis into the details of specific firms.

Storper (2013) takes a broader view along similar lines. He is also dismissive of Florida style amenity theory as important to city growth and contends that it can mislead city policy away from effective concentration on income generation which, as Sassen also contends, comes from increased innovation and specialisation. We have a sort of reverse Resource Based View (Barney, 1991) where competitive advantage is realised through recognising and exploiting the talent in cities as opposed to within companies, which aligns with one of Florida's key propositions, the view that cities have taken over from companies as the centres of social and economic organisation.

2.4.3 The triumph of the city

These leading commentators all agree that cities, paradoxically perhaps, are the principal centres of economic growth and that the main reason for this lies in their concentrations of talent. There are differences of opinion as to how the relationships between cities and their skilled inhabitants work and as to what is most important in explaining the success but the "triumph of the city", in the words of Glaeser (2011), is agreed. What none of these writers do, however, is get the view from inside the firm.

Cities and city-regions are undoubtedly at the heart of economic development today as is illustrated, at least for the United Kingdom, in the data used in this thesis to help select the

place and industry dimensions for the empirical study. Together with the findings from economic literature the case is well made that it is the PFR in cities that is most appropriate for this research. The data also support another general theme referred to in relation to city growth, namely that the centre of gravity of economic development is moving from manufacturing and more traditional industries to knowledge-based work and services. A key question here, though, is what is the role of the city in the PFR in the context of supporting a firm's competitive advantage. Is the pivotal role of cities based on what they offer firms, as control centres (Sassen, 2012) or workshops (Storper, 2013), or is it what they offer talented people as playgrounds and hubs for creative interaction (Glaeser, 2011; Florida, 2002, 2012)? The aim in this research is not to dismiss any possibility but to consider all and ask firms what they think. The literature in this area yields many prospective lines of enquiry but, as with the other work considered in the broader field of economic geography, there is little in the literature in this area that takes the approach of looking out and up from the viewpoint of the firm.

2.5 Clusters and Firms

All the studies described above in economic geography, on agglomeration and clusters, on the growing importance of cities, have added new knowledge to what makes up clusters and how they operate. Very few looked through the unit of analysis of the firm. Firms were involved, often interviewed, but largely from the perspective of studying regional traits rather than the motivation behind corporate decisions and their relationship with the PFR. There is a view that firms are rather passive and heavily influenced by regional forces outside their control, an example of contingency theory perhaps. This suggests an absence of any kind of prescriptive strategy or agency in firms. This suggests an absence of any leadership from key individuals or businesses. Firms originate from happenstance and locate where the founder lives. They grow through imitation and spin-offs and are held in place by an inertia and a fundamental reluctance to move (Frenken, Cefis & Stam, 2015; Malmberg & Maskell, 2002). Firms are rather passive expressions of economic forces; passengers rather than drivers. This is very much at odds with the strategic management view of how the business world works.

As agglomeration occurs largely due to forces in a regional environment, research is focused on this environment and how it is created. This is a reasonable position but, whether taking the classical approach (Marshall, 1st ed. 1890), flexible specialisation (Piore & Sabel, 1984), clusters and the diamond (Porter, 1998), innovative milieux (Saxenian, 1994) or cities and

the knowledge economy (Florida, 2012), it unreasonably relegates firms to being passive players, homogeneous black boxes that all respond in a similar manner to certain external drivers to all get the same or similar results. There is no bottom-up mapping to match the top down approach. Porter in his diamond does identify the importance of firm strategy but this is presented as incidental rather than instrumental.

As noted, work by some scholars including Oahey et al (1988), Walther et al (2011) and Hall (2017) has consciously tried to redress the balance by investigating the view from the firm. Several studies like these specifically recognise the potential importance of the relationships between individual firms and regional forces and, more importantly, that these relationships are not well understood and merit further research. This challenge for further research has not, in the main, been taken up in mainstream economic geography, however. There are good examples of writers seeking input from firms on various topics relating to doing business in particular places but there is little evidence of taking this further into getting a rounded, comprehensive view of how firms see their relationship with places in the context of their commercial success, their ability to achieve competitive advantage.

There are three possible reasons for this approach. First, that place is just not considered to be an important strategic decision for firms; or that it is an important decision but is not treated as such because the benefits of staying where you know outstrip all other considerations. Managers might prefer to fix place, for personal reasons, and adjust strategy rather than move outside home territory (Boschma & Frenken, 2006). As noted in the Introduction, the view from the firm comes from the views of managers and these are subject to behavioural traits, for example the endowment effect, valuing what you have more than what is available and attainable, and the sunk costs fallacy, the inability to act rationally in writing off past expenditure of money or resource or even relationship building (Thaler, 2015). This is certainly supported by the lack of attention to place in the discipline of strategic management as outlined.

Alternatively, it could be down to the nature of the audience for the academic work. Aside from fellow academics the economic geography literature is primarily directed towards those involved in economic development and policy making, for example through journals like *Economic Development Quarterly* and *Environment and Planning*. In summarising the implications of findings, many articles cite the value to policy makers and government agencies (e.g. Malmberg & Maskell, 2002; Markusen 1996; Storper, 1995). Very few seem to have anything to say to firms and their managers and their work is not published in

management journals, (Clarivate Analytics, Web of Science 2018). Policy makers want to hear about regional forces they can stimulate and manage. They are looking for opportunities for intervention that are individual firm neutral, that will produce the same benefits across all firms and contribute to place development as opposed to firm development. Most would actually be accused of the misuse of membership or public funds if their actions were seen to benefit one or more firms over others. This is mirrored, from the opposite direction, in the clear intent in strategic management to talk to a different audience, of managers and consultants, and to feed the business education and consultancy industry on a diet composed of the paramountcy of the individual firm at war with all comers.

A third possibility is the very complexity of the topic. As Markusen notes “..sticky places (places that tend to hang on to prosperity) are complex products of multiple forces: corporate strategies, industrial structures, profit cycles, state priorities, local and national politics” (1996, p.309). There is a tendency to look for clear, dominant and easily understood reasons behind observable phenomena but in the case of the PFR, or even the theory behind agglomeration and clusters, this is perhaps more complicated and nuanced than expected or desirable. This has also been advanced as a reason behind the failure of economics to really embrace the significance of space and places (Krugman, 1995).

Whatever the reasons for the omission this research aims to contribute to bridging this gap by opening up the questions and looking at the firm as the unit of analysis in relation to the place decision and the PFR.

2.6 Theory, Literature and the Framework for Analysis

Bringing together the thinking from strategic management and that from economic geography reveals similarities and differences and, most of all, complementary gaps.

Strategic management and economic geography stem from the same roots of classical economics going back to Adam Smith (1776) and Ricardo (1821), to the division and specialisation of labour and to comparative advantage. Both disciplines have seen a development phase dominated by a very scientific approach followed by a period of greater interest in less rational, cultural and human factors. Both have more recently recognised the over-riding significance of knowledge creation and transfer to successful economic performance in this age of globalisation coupled with rapid technological change and the growth of service industries. Yet there is a distinct gap between them in how they have approached the same subject of the place-firm relationship. Strategic management researchers are place blind, work is presented as place neutral. Economic geographers veer

to the opposite, tending to keep individual firms in the shadows and seeing place as all. In strategic management, the manager is all. The destinies of firms revolve around the actions of individuals and the ways they manage and lead their companies following, of course, the latest precepts from the strategic management industry. In economic geography, the manager counts for very little. Firms tend to be seen as all much the same and all responding to place and environmental influences in much the same, rational and predictable way. There is no management exceptionalism, little suggestion of the possible role of human agency in success or inspirational leadership at the firm level.

These are generalisations to which there have been some notable exceptions. Saxenian's work on Silicon Valley and Route 128 (1994; 1996) is very focused on a small number of companies where the place-firm relationship can be felt quite strongly. This is a fascinating, descriptive case study more than an analysis of cause and effect, however, and it is mostly about place. The companies are essentially just being representative, albeit representative of two clearly identifiable and different types, serving to illustrate regional phenomena. Storper (1997) identifies firms as the agents with greatest power to shape relationships between territories and notes that the opening up and closing down of variety by firms is the main dynamic of wealth creation but he does not venture into the analysis of individual examples.

Work by Oakey et al (1988), Walther et al (2011) and Hall (2017) gives examples of economic geographers venturing into researching the view of the firm on clusters and agglomeration but their examples and suggestions for further research have not, in the main, been pursued within the discipline.

In strategic management there is consideration of place factors in PESTEL analysis and in the related branch of international business and the analysis of FDI by MNEs. Forays by strategic management researchers into place and by economic geographers into firms are not uncommon but are usually done to serve the more dominant agenda of each discipline.

This divergence stems from several factors already touched upon. Firstly, despite common roots, there has been a quite different genesis for each school. Economic geography, perhaps naturally, has a longer and more international pedigree than strategic management. Early work was international and dominated by empirical detail about natural differences accounting for uneven economic development, for example von Thünen (1842), Chisholm (1889) and Smith (1913). Strategic management has been very much the child of the north-

east of the USA with a focus on the internal workings of firms to produce differences in economic success, for example, Drucker (1955), Chandler (1962) and Porter (1985).

Secondly and not unrelated to the above, has been the divergence in focus in terms of competition and collaboration. Both disciplines have roots in classical economics as mentioned and in an idea of homo economicus (Henrich et al, 2001; Thaler, 2000) but they have evolved with different emphases. Strategic management has tended to interpret man's rationality as being driven by a survival of the fittest or kill or be killed ethos, for example Henderson (1989), whilst economic geography has been more inclined to interpret that same rationality as a tendency to co-operate, or at least compete constructively, to find the maximum benefit through working in collaboration with others, as exemplified in much studied agglomerations like Baden-Württemberg and Emilia Romagna (Cooke & Morgan, 1998).

In reality, and as the results of this research suggest, it appears neither approach is wholly correct but both are partly correct; it appears more likely that the rational economic man or woman might be able to determine between when their interests are best served by co-operating and when they are best served by self-sufficiency and might, therefore, be able to combine the two. It also appears that men and women, and the firms they run, are not always driven by purely rational impulses (Thaler, 2000; 2015).

Thirdly, as noted above, both disciplines are influenced by who they write for, their target audiences outside the immediate academic milieu. In strategic management, work has been directed towards firms, professional managers and the burgeoning management education industry. Economic geography publications have been more directed to economic planners, development agencies and government. This naturally affects the orientation of the work because both external audiences are looking for something that will be useful in meeting their day to day challenges, for giving straightforward guidance.

Fourthly, veritable industries have grown up around both positions fuelled by erudite, self-reinforcing arguments and a professional self-interest that have contributed to a degree of tunnel vision, a reluctance to compromise and lock-in. The origins of these positions may have been lost to many, but it is more difficult to turn back the tide of history and precedent than go with the flow, especially if it pays the bills (David, 1985).

Fifthly, as also previously noted and expressed in Markusen's reference to sticky places as complex products of multiple forces (Markusen, 1996), understanding the PFR is not easy. It

is a big subject that stretches out in a great many directions and it is not just the disciplines of strategic management and economic geography that have difficulty coming together to bring some understanding. Thisse and Walliser note that, despite space being the “crucible of economic activity” (Thisse & Walliser, 1998, p.14), economists have also regarded this relationship between space and economic activity, effectively between places and firms, as intractable. They note that “most economic models still suggest that economic activity takes place on the tip of a needle” (Thisse & Walliser, 1998, p.12) and this narrow focus has perhaps influenced the approach within strategic management.

Lastly there is the *as if* theory (Thaler, 2015) that strategic management does consider place, but it is as if it is there in the background of every strategy, of every decision. It is a powerful influence that does not need to be articulated. It is the “American way” as Drucker (1946) mentioned in terms of the (US) national political philosophy needed for business success; nobody has thought it necessary to point this out again. Similarly, in economic geography, it might be suggested that of course all firms are different and good or bad management can have an effect, but the end result is *as if* they are all the same because there is an averaging out into a representative firm that embodies rationalism and predictability. Alternatively, as in the Oakey study mentioned above (Oakey, et al., 1988), it could be that management is generally considered as merely reactive to external forces and individual agency has no place in strategies for linking place to competitive advantage. This was the result of a particular study of small firms in high technology, however. It is a pity that there was not the interest from Economic Geography to follow this lead and extend this approach, the study of both internal and external factors, to other types of place-firm relationships. This is something this study can resurrect and build on.

There are strong reasons why the disciplines have taken different routes but, for the firms on the ground, there is only one reality that neither school of thought has completely described far less explained. The above six constraints present challenges for this research but not barriers.

There have been signs that the two approaches could be brought together. Work by Porter on national competitive advantage (Porter, 1998) triggered an engagement across the disciplines that looked as if it might bridge this divergence by aligning the two sides around competitive advantage and the concept of clusters. In the event, the attempted rapprochement did more to reveal incompatibility in thinking than the opposite but it did widen the debate and, more significantly, initiated a framework for analysis of the issues in

Porter's *diamond* that has remained in use as a base for the exchange of views, teaching and further research. Porter has indeed lamented the fact that the role of location is absent in strategic management thinking (Porter, 2000) and has recognised the need to integrate economic geography research into issues around how firms build and sustain competitive advantage (Porter & Sölvell, 1999) but has offered little towards progress on this front. More recently, Whittington et al (2011) have recognised both the need and the inevitability of strategy to open out, to be more all-embracing and more transparent, and although this does not recognise the importance of place factors specifically there is mention that there needs to be a better understanding of strategy under different social and economic conditions.

From the various considerations of strategic management and economic geography it is possible to identify a number of considerations that are likely to affect a firm's decision about place. Labour and transportation availability and costs are likely to be important, although generally and relatively less so than in the early nineteenth century. Access to market and transaction costs should be considered. The network effect outlined by Saxenian (1994) and the significance of the skilled labour pool noted by Henry & Pinch (2000), Glaeser (2011), Florida (2012) and Sassen (2012) are relevant. The institutions and conventions that lie behind the untraded interdependencies and the cultural influences seen by James amongst the Mormons (2005) are important. The need for firms to balance competition and co-operation to meet their overall objectives and the evolution of the PFR to accommodate expansion and consolidation must have significant effects (Newlands, 2003; Ottati, 1994; You & Wilkinson, 1994). There are the hard factors of location theory, like infrastructure, access to market and labour costs and the softer factors of networking, knowledge creation and spill-overs, institutions and conventions, political environment and chance, personal preferences and inertia. The idea of a sticky mix (Markusen, 1996) looks more and more relevant, but can we construct a picture of this sticky mx? All these elements are considered more fully in section 3.4 following when they are brought together in the construction of the new framework for analysis.

The existing literature contributes a rich array of factors affecting the place decision but there is a lack of input from firms themselves on what is critical in terms of their strategies and why and how the interdependencies work. This research draws on the extensive literature described. It tests the main PFR factors identified in an empirical study involving senior business managers. It adds factors not identified in literature but mentioned by the managers. It combines all of these into a new framework for analysis that eliminates many

of the gaps in the current study of the PFR and it analyses key findings about the inter-relationships of the factors to reveal priorities and connections.

3 Methodology

3.1 The Methodological Approach

My aim is to research the relationship between successful firms and successful places. I have used a quantitative approach to identify successful places with successful business sectors, a mixed approach to identify suitable firms within these places and sectors and a qualitative approach to investigate the relationship between firms and places, the biggest empirical contribution of the research.

This chapter describes how and why the methodology was chosen, how and why the subjects for the research were chosen (the financial services firms in Edinburgh and Glasgow) and how the data was analysed, using a bespoke framework for analysis derived from literature, the emergence of a model for the PFR and the interview process itself. Figure 3-1 below gives an overview of the process.

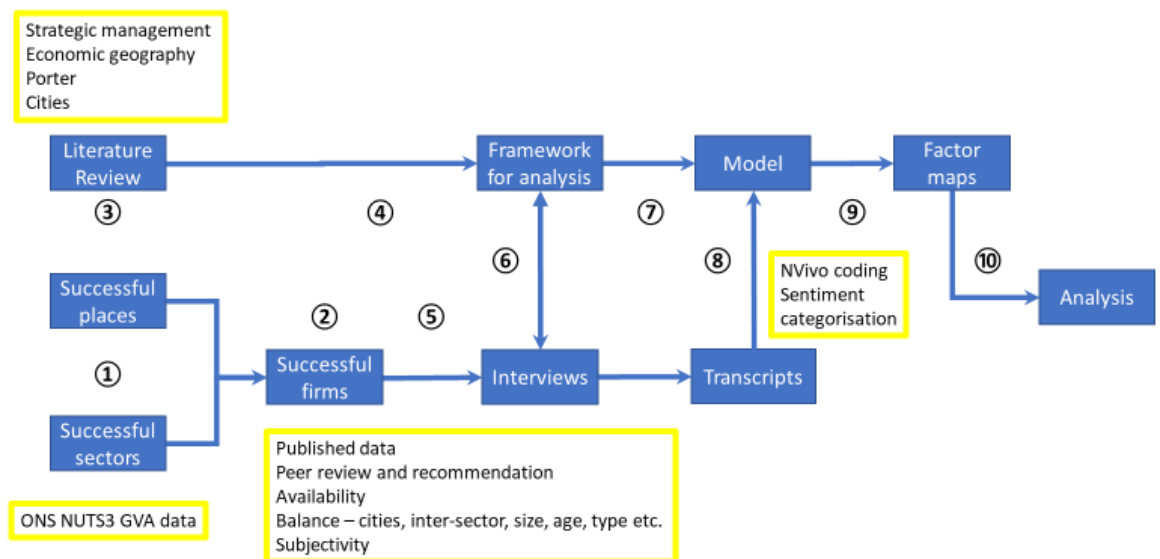


Figure 3-1 Research process overview
(Source: developed by the author)

I have taken a critical realist position to using mixed methods as explained by Maxwell and Mittapalli (2011). I have started from a realist ontology that there is a real world independent of our perceptions, theories and constructions, a world of successful firms and successful places, but combined this with a constructivist epistemology in relation to understanding this world. This real world of successful firms in successful places I have defined for the purposes

of this research with data from the UK Office for National Statistics (ONS, 2015), as per ① above and section 3.2.1 following. The firms representing successful business I have identified partly using quantitative data but mostly through purposive and snowball sampling. I have sought to investigate a range of companies, not just established players defined by size, turnover or profitability, and have, therefore, looked beyond numerical performance indicators. My intention has been to capture views from across the chosen sector, in the chosen places, from firms small and large, employed in different activities, at different stages of development and including both head offices and subsidiaries. I am exploring relatively uncharted territory, looking for directions. I have, thus, used a mixture of primary and secondary approaches, integrating data from direct discussion and interviews, literature from both academic and general business sources, web-sites and periodicals, as per ② above and section 3.2.2 following.

In terms of the place-firm relationship, as already noted, existing theory and literature does not adequately cover this, particularly from a point of view that puts the firm at the centre of the analysis. Data from the review of the literature, Chapter 2 and ③ above, has been fed into shaping a framework for analysis however, ④ above and section 3.3 following, which has been used as a starting point for an empirical study with the businesses identified in the earlier steps.

Whilst I have been able to draw on various strands of theory from strategic management and economic geography I have had to look deeper into the PFR to find ways to pull these strands together and to address gaps. I have done this primarily through asking those directly involved, business managers, business support organisation (BSO) managers and university business school representatives from selected organisations, what they think are the key elements in the PFR, ⑤ above. This part of the process is described more fully in section 3.4 following. The framework for analysis derived from the literature has been used as a basis for the interviews but the feedback from these has, in turn, been used to make adjustments and additions to the framework, ⑥ above. From this synthesis a new model has been developed for the PFR, ⑦ above. Transcripts of interviews and notes of meetings have been coded using NVivo 11 and sentiment categorisation and fed into this model, as per ⑧ above and sections 3.4.6 and 3.5 following. The results have been shaped and presented in factor maps for better visualisation and interpretation, ⑨ above and section 3.6 following, and then for detailed analysis, ⑩ above and Chapter 5 following.

The process in itself has produced two major contributions from this research, namely the creation of a new mechanism for studying the PFR and the derivation of a new model to represent the PFR. These outcomes are detailed in Chapter 5 as are the further contributions from applying the model to the selected study population.

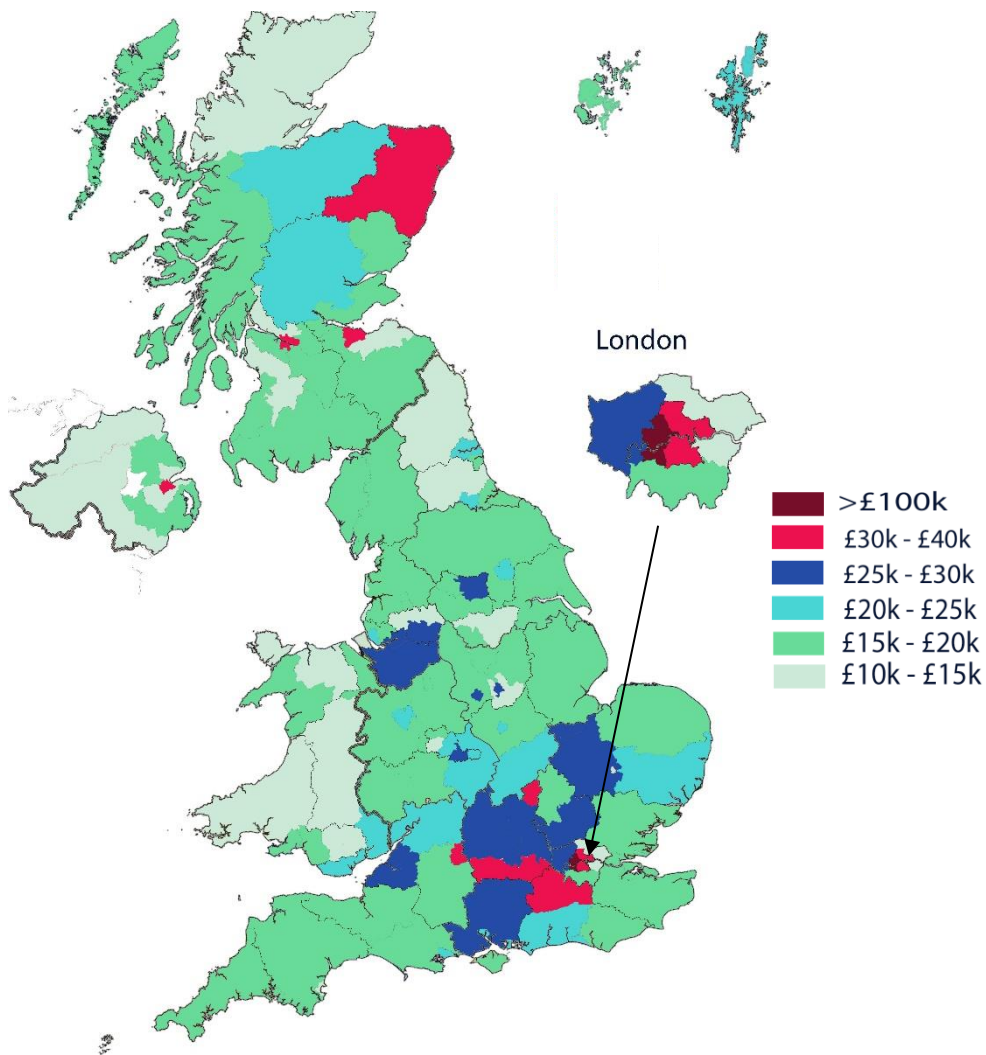
3.2 Study Population Selection

As discussed in the reflections on cluster theory and the criticisms of Porter's work in particular, section 2.3.3 and Table 2-2, the aim is to build up from views at the most localised level. Data collection at this level has involved four stages of selection, namely successful places, successful sectors, successful firms and, finally, senior executives able to represent the views of the firms within the successful sectors and successful places.

3.2.1 Successful places and sectors

Successful places, successful sectors and successful businesses can be found in almost any country in the world. There is inequality of economic development everywhere; there are parts of countries doing well, often the main cities, and parts doing badly. Looked at relatively, it is usually possible to find success in even the poorest countries. I have chosen to concentrate my study in one of the world's richest countries and my home base, the United Kingdom, the 5th biggest economy in the world (World Bank, 2017). Economic success is clearly evident and perhaps has deeper roots than in most other countries although it is hoped that, with further research, some of the lessons learned from studying this subject in the United Kingdom may be applicable elsewhere. (A major criticism of the literature in this area, especially from strategic management, is the US ethnocentrism. I do not intend to jump to global generalisations from a study in the UK, but neither would it be sensible to ignore possible pointers to more widely applicable principles).

Economic success is far from uniform in the United Kingdom. Figure 3-2 below shows per capita Gross Value Added (GVA) across the United Kingdom at the European Union standard NUTS3 level, the most detailed level of analysis used by the Office for National Statistics (ONS). The wide disparity across the country is clearly evident with certain city regions standing out as the most prosperous and economically successful areas. This creates a focus in line with the reflections on Porter's *Competitive Advantage of Nations* (1998) mentioned above and in economic geography generally to consider places below the national level whilst also emphasising the validity of these reflections. This picture is a very clear rebuttal of the national level of analysis.



*Figure 3-2 UK GVA per capita, 2013, at NUTS3
(Source: developed by the author with data from ONS, 2015)*

GVA data, more precisely Income Approach Workplace Based GVA at current basic prices estimates, are measures of productivity and have been used as the best indicators of locational economic performance. These are shown here on a per capita basis to neutralise the effect of high population concentrations. The figures can be tracked by place, as above, and by industry classification.

In terms of identifying sustained success, growth in these figures has been plotted from 1997 up to the latest available (varying between 2012 and 2014). There are many variations on the data that could be used in terms of, for example, type, duration and start and end points. This data set gives the best consistency for comparisons over time and place, covers periods of growth and recession and includes significant political and economic changes. Data prior

to 1997 is not easily comparable so this set gives the longest period for consistency and it is a period long enough to reveal underlying trends of sustainable success whilst being recent enough to be up-to-date. The start and end points are not years of exceptional change.

To identify the most appropriate industry sector in which to find successful firms I considered industry group GVA data in terms of both size and rate of growth. Figure 3-3 below plots the growth in GVA between 1997 and 2012 (x – axis) against the total value in 2012 by industry group (y-axis). Clearly the best performer in terms of both measures is Real Estate Activities, however, I have not focused on this sector as I believe this growth has been as much a product of economic success as a driver thereof; as noted earlier, there is a danger of mistaking effect for cause in analysing the growth of cities and city-regions.

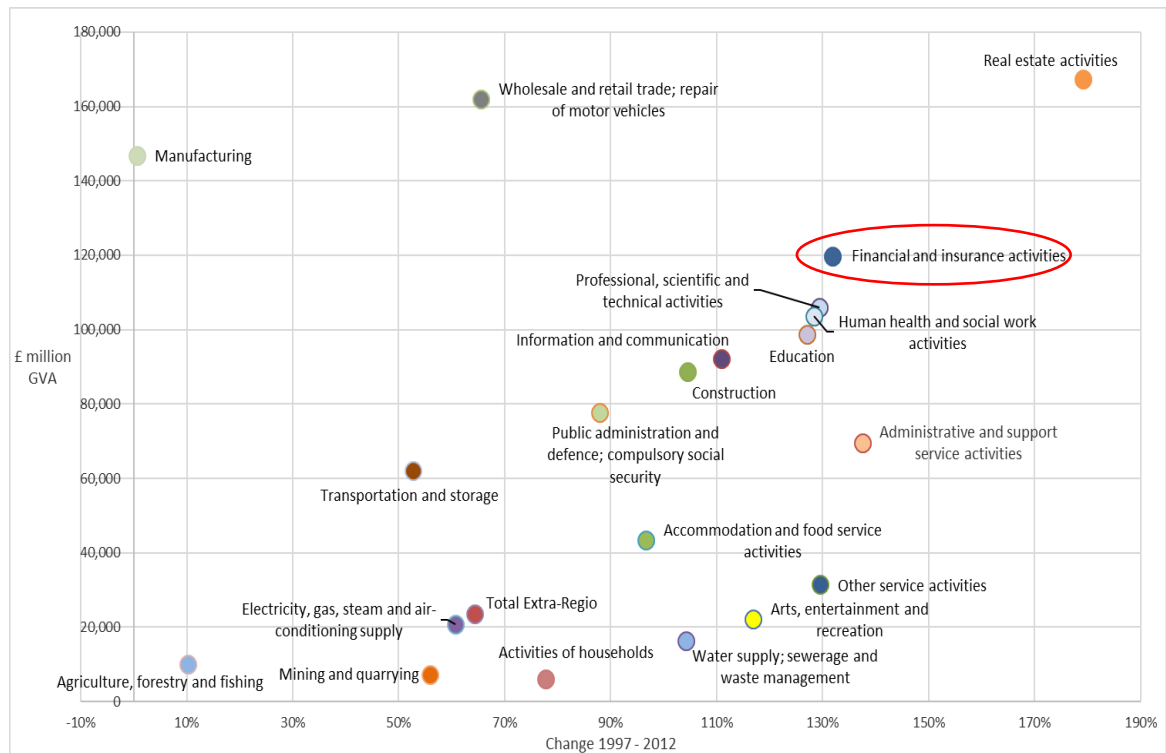


Figure 3-3 UK GVA by industry group, actual 2012 v change 1997-2012
(Source: developed by the author with data from ONS, 2015)

I have chosen to concentrate on the category Financial and Insurance Activities which is the second-best combination of size and growth, but embodies some of the forces underlying the knowledge economy that, as already mentioned, are considered to be key to economic growth today, particularly in cities.

I decided to study two places in the first instance as a comparison gives early indications of aspects that might be very place specific compared to those that might be more industry

specific or even generalisable. In the United Kingdom, London dominates the economy in terms of total GVA, total GVA growth and GVA growth in financial and insurance activities. I have excluded London, however, because of its size and complexity and the fact that the only valid comparison could be with another global city in another country. To get viable comparisons within the UK I have taken London out of the analysis and focused on the second-tier city regions. Figure 3-4 below shows the top cities in the country for Financial and Insurance Activities in terms of total GVA in 2014 (y-axis) and the growth in GVA since 1997 (x-axis).

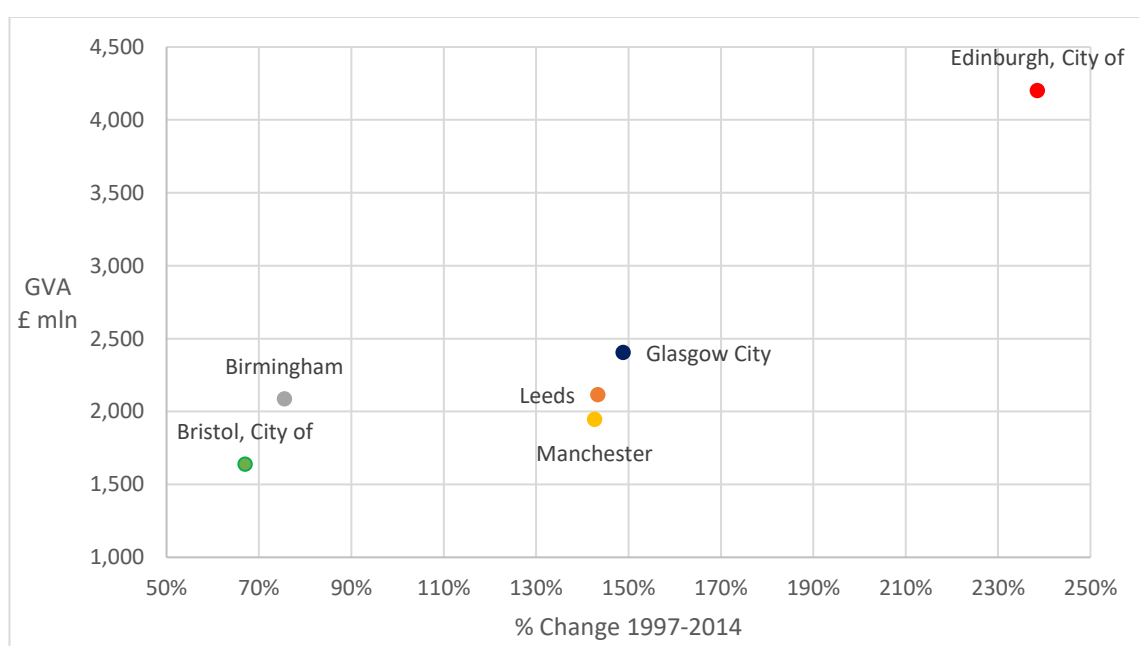


Figure 3-4 UK GVA by Finance and Insurance Activities, top areas excl. London, actual 2014 v change 1997-2014

(Source: developed by the author with data from ONS, 2015)

Edinburgh is very clearly the best performer with Glasgow second, closely followed by Leeds and Manchester. I have, therefore, chosen to centre my research on Edinburgh and Glasgow.

In summary, I focused my research on Financial and Insurance Activities (generally shortened to financial services through the rest of the piece) in Edinburgh and Glasgow because these businesses are in high performing sectors in high performing cities in the UK. I chose to look at the two cities together to give a comparison to identify factors that might be common for financial services businesses in relation to locations and those which might be particular to one location, a guide to influencing further research and to theoretical considerations. This notwithstanding, the fact that Edinburgh and Glasgow are geographically close and share the same basic factors as law, regulatory regime, language etc. has allowed for a consideration

of deeper factors behind PFR differences observed; the comparison has been made without the distraction of different macroeconomic environments. The two centres are also tight clusters, exhibiting the business proximity that is central to much of the thinking about locational competitive advantage, with a wide variety of successful financial services firms in both places as well as well-developed ancillary services. The first research question, section 1.6 above, relates to UK financial firms. Comparing results for firms in Edinburgh and Glasgow is valid in this context as these are the two best performing places outside London in the sector. The fact that they are both in Scotland may point to a distinctive regional place factor for further consideration.

In the event, the choice of this industry sector in these two cities proved fortuitous in the richness and diversity of place factors and in the stark comparisons revealed. The choice was made on the basis of the quantitative data however, not on prior knowledge of this potential.

3.2.2 Firms, organisations and managers

Choosing the firms to include from financial services in Edinburgh and Glasgow was a more subjective exercise based on putting together a group representative of the wide range of activities in this sector that also constitutes a balance between the two cities, a balance between old and new, a balance between local and incoming, a balance between head offices and subsidiaries and a balance between small and large, whilst meeting the underlying criterion of being successful. To make the choices I have used purposive sampling from a wide variety of data and published reports and snowball sampling in following up on recommendations from my interviewees (Blaikie, 2010). The choice was also partly dictated by the availability and willingness of key personnel to be interviewed, particularly given the emphasis on targeting senior personnel, though generally the response to requests was very good.

In addition to firms themselves, I also approached several of the most important business support organisations both to get their recommendations of successful businesses and to seek their views as to the firms' views. These organisations, like Glasgow Chamber of Commerce, Scottish Enterprise and Scottish Financial Enterprise, are regularly involved in this sort of assessment; collecting the views of those in the industry, collating these, trying to make sense of them and representing them to government and other stakeholders to influence policy and intervention. Talking to them as well as to individual firms served both as a source of information and recommendations and a possibility to cross-check some of my own directly received data. This proved quite revealing as the business support

organisations' views on what the firms' views are were not always consistent with what firms actually said. On the other hand, there was more consistency than inconsistency.

I also took views from representatives in the Business Schools of two local universities, one in Edinburgh and one in Glasgow, again because they are also involved in undertaking similar enquiries on a regular basis and I felt I could gain from what they had learned and how they approached their data gathering. Universities and business support organisations also proved to be very good sources for recommendations of appropriate contacts within the firms for my qualitative data accumulation.

The precise process of selecting interviewees started with a long list of over 200 organisations for which I prepared profiles from published data, mostly web sites. An example of one such profile is given in Appendix 1. I compared my organisational profiles with the overall profiles of financial services in each city as described in Chapter 4 following. I recognised that I would need to talk to representatives from the main sectors, for example commercial banking, investment management, insurance, shared services and accountancy, in both cities with a slight weighting towards banking reflecting its longer duration and size and towards Edinburgh for the same reasons. I wanted to talk to successful businesses but finding straightforward criteria to define success within the list was not easy, especially when looking across sectors and aiming to include young and old businesses and large and small. Looking at a single or even one or two vectors, for example, number of employees and financial turnover, would not have produced a meaningful comparison to prove this. It was essentially a matter of judgement, although not my judgement alone. One way I tackled this was to ask those in the industry as I went along. People working at high levels in financial services generally know which businesses are successful, especially if they are competitors.

I started my discussions with two BSOs. I used recommendations from these, plus my background profiling and analysis as described, to approach another 5 businesses. I repeated this combination of purposive and snowball sampling without fixing an overall target in advance but working progressively, in batches of about 5 firms at a time, deliberately staggering the process in order to assimilate learning as I progressed. I continued until I felt I had reached a level of saturation signalled by my increasing awareness of my ability to foresee the course of interviews and a recognition that I had enough material to address my research questions and that there would be a danger in continuing to create what might become a fog of too much data for in-depth assimilation.

In the end I approached 35 people for interview. Prospective participants were approached by letter, email or telephone with a very brief outline of the purpose of the research and my personal details and objectives. The aim from the start was to instigate a personal dialogue which naturally favoured subjectivity and points of view rather than a colder, guarded objectivity.

I had only one outright rejection and 5 nil returns. One interview turned out to have two interviewees and for one organisation I undertook two interviews with two quite different respondents. In the end I coded data for 29 organisational views gained from a mixture of interviews and separate, extended meetings involving 30 people in total. Through the mix of published data, purposive and snowball sampling, insider advice and subjective judgement I identified a strong, varied group who have been very generous with their time and commitment and very forthcoming with considered and informed views on the research subject. I have a rich cross-section of contributions which has helped immensely in deriving meaningful findings.

Several of the firms have offices in both cities and, in fact, in many locations across the UK and overseas. I have allocated the firm, and geared the questioning, to the city where the interview took place which was also the place, in every case, of the interviewee's principal desk.

There is roughly equal representation from both cities and appropriate representation across the segments reflecting the relative importance of these areas. The aim is to obtain insights into the PFR from a variety of positions. The sample is not intended to be definitive for either city or for the sector as a whole, or for any segment thereof. Table 3-1 below gives a profile of the 29 organisational views.

Table 3-1 Organisational view profile

ID	Organisation	Location	Employees at location	Nature of presence	Interviewee
M3	Specialist Bank	Edinburgh	20 - 200	HQ	Director
M4/I1	BSO	Edinburgh	< 20		CEO
I2	University Business School	Edinburgh	201 - 400		Professor
I3	Specialist Bank	Edinburgh	< 20	HQ	Chairman
M5/I6	Commercial Bank	Edinburgh	> 400	HQ	Chief Economist
I4	Specialist Bank	Edinburgh	20 - 200	HQ	Chairman
I5	Investment Manager	Edinburgh	< 20	HQ	Partner
I7	Investment Manager	Edinburgh	< 20	HQ	Partner
I8	Fintech	Edinburgh	20 - 200	Branch	MD
I9	Investment Mgt. Insurance	Edinburgh	> 400	HQ	CEO
M8/I12	Support Services	Edinburgh	201 - 400	Branch	Partner
I13	Shared Services	Glasgow	20 - 200	Branch	Partner
M10/I19	University Business School	Glasgow	201 - 400		Professor
I14	Commercial Bank	Edinburgh	> 400	HQ	MD
I15	Investment Manager	Edinburgh	> 400	HQ	Partner
I16	Support Services	Glasgow	20 - 200	Branch	Partner
I17	Asset Services	Edinburgh	201 - 400	Branch	MD
I18	Commercial Bank	Glasgow	> 400	HQ	COO
I20	Insurance	Glasgow	201 - 400	Branch	MD
I21	Commercial Bank	Edinburgh	> 400	HQ	CFO
I22	Shared Services	Glasgow	> 400	Branch	MD
I23	Fintech	Glasgow	< 20	HQ	CEO
I24	Insurance	Glasgow	201 - 400	Branch	Director
I25	BSO	Glasgow	< 20		CEO
I26	BSO	Glasgow	> 400		Director & Manager
I27	BSO	Edinburgh	< 20		CEO
I28	Commercial Bank	Glasgow	> 400	Branch	Director
I29	BSO	Glasgow	20 - 200		Manager
I30	Shared Services	Glasgow	201 - 400	Branch	Vice President

(Source: company/BSO web sites and interviews)

N.B The interview codes in the ID column are used throughout later sections to identify the source of quotations.

I engaged intentionally with people in the organisations approached who I believe have an interest in, and responsibility for, strategic direction and management. Whilst inevitably their responses have reflected personal views they have also been able to speak on behalf of their enterprises, to give a view from the organisation. The interviewees chosen were generally highly experienced people holding senior positions. The emphasis throughout has been very much more on quality than quantity to get depth and comparability. Most of the interviewees were male, 26 out of 30, a choice made by the evolution of the businesses not by me. Over 75% of the respondents were the most senior people at that business location.

Others all held expertise of direct relevance to the subject of the exercise, for example as Chief Economist, Director or Partner. The aim has been to engage a panel of knowledgeable informants (Weiss, 1995) as opposed to taking a random sample. As mentioned, there was a degree of snowball sampling in seeking recommendations from the interviewees themselves, but these recommendations were only pursued where they fitted into the overall framework requiring representation from across the range of financial services and from both cities.

Table 3-2 following shows a profile of the 30 people (one interview involved two interviewees) engaged in the data collection in terms of age and where they hail from. They were selected on the basis of firm or organisation and position therein, not on the basis of age or place of birth. These data just help to define the group as a background to later analysis.

Table 3-2 Participant profile

	Total	Age					Birthplace		
		30– 9	40–49	50–59	60– 69	70+	Scotland	England	Other
CEO	5		1	3	1		3	2	
Chairman	2				2		1	1	
COO; CFO; Cecon.	3		2		1		3		
Director	4	1	2	1			4		
Manager	2	2					2		
MD	5	1	2	2			2	2	1
Partner	6			4	1	1	6		
Vice President	1			1			1		
Professors	2			2				2	
	30	4	7	13	5	1	22	7	1

(Source: as developed by the author from interviews and web sites)

3.3 The Framework for Analysis and the PFR Model

One of the most challenging and innovative aspects of this research, and a significant part of the overall contribution, has been the creation of the framework for analysis. It combines the incomplete existing theory and literature on the subject with fresh information from the empirical study in a way to not view of the PFR but to permit analysis to determine priorities within it, positive and negative attributes and the inter-relationships. The consideration of the literature, the coding of the interview references and the development of the framework

moved hand-in-hand, see Figure 3-1, integrating the theoretical grounding with the qualitative data to create a model for the PFR, a structure for the coding of the data and then a means with which to study the PFRs in the cases chosen and to represent these for interpretation and analysis in key factor maps.

This exercise produced two of the main contributions of this research, the framework and the resulting model. The detailed structure of both of these is shown in Chapter 5, sections 5.1. and 5.2 respectively. They were born out of the necessity to have a structured basis on which to build the qualitative empirical study. The framework consists of a hierarchical grouping of all the factors considered important in the PFR, from aspects of the ease of doing business to the availability of suitably skilled workers to city culture and many more. Five main themes emerged as listed in Table 3-3 below.

Table 3-3 The five themes of the PFR Framework

<i>Ease of doing business</i>
<i>Talent</i>
<i>Quality of life</i>
<i>Local networks</i>
<i>Legacy</i>

(Source: developed by the author)

These are the principal building blocks to analyse the PFR taking into account that the relationship is multi-faceted; covers hard, tangible factors and soft, intangible factors; covers microeconomic factors and macroeconomic factors; covers factors from the past as well as from the present and involves significant interaction across all factors. The five themes have been further sub-divided across 24 level-2 factors and then 11 level-3 factors to facilitate presentation and analysis. The degree to which the themes have been broken down into level-2 and then level-3 factors reflects the frequency and variation of references within each theme. Together these embrace all aspects of the PFR as identified by past theorising and current practice. The derivation of the full classification is discussed in Chapter 5 and the full structure is given in Appendix 3.

As it became clear that the PFR rested on more than a few common, key factors but rather incorporated a dynamic mix of factors interacting with firms and each other the model took shape as also described in Chapter 5. In terms of the process, this model was then used to give shape to the analysis of the empirical study qualitative data.

3.4 Qualitative Data Collection

3.4.1 Why qualitative?

I have taken an inductive approach in relation to the main part of this research, seeking to derive some general principles from my observation of the observations of others, which has required the collection, interpretation and analysis of qualitative data. As I wanted to get first hand feedback from businesses when I was not sure in advance where the questioning would exactly take me I needed to use this flexible, qualitative approach, as suggested by Ghauri & Grønhaug (2005, p. 111): “It is generally accepted that, for inductive and exploratory research, qualitative methods are most useful, as they can lead us to hypothesis building and explanations.

A quantitative approach would not have been possible as I have been shaping the framework for the analysis whilst collecting the data.

This focus on qualitative data has also meant that I have been able to gain a greater in-depth understanding of the subject matter (Bryman, 2012), insights (Ghauri & Grønhaug, 2005) and possible leads for theory generation (Blaikie, 2010) than would have been possible with a purely quantitative approach. Semi-structured interviews were the main source of data, while other data sources helped to verify and add to the findings of these interviews, thus increasing their validity. As noted above, the data collection has been driven by purposive sampling of both context and participants (Bryman, 2012). The search was not random but driven by very specific ideas of what I was looking for. Potential interviewees were identified through events, desk research and existing contacts. I have very deliberately chosen quality and depth over numbers and breadth. I have focused on a relatively small number of very senior personnel for these lengthy, face-to-face interviews. Snowball sampling was integrated into the purposive approach to refine the selection with interviewees being asked to recommend others who could make appropriate contributions (Steinz, et al., 2015).

3.4.2 Why interviewing?

Qualitative data can be collected in a number of ways including from questionnaires, from focus groups, from published material, from on-line sources and other channels. I decided that semi-structured interviewing of key figures in the relevant companies and business organisations was the most suitable way to gather data in this context.

As noted above, the qualitative approach was designed to yield a two-fold benefit in both producing data for analysis and input for the framework within which it is analysed. I needed to collect data in a way in which I could compare responses across likely themes but, at the

same time, would leave the possibility for new thinking to emerge. I was also particularly keen to let the participants make clear what they considered most important. I did not want to run through a checklist where every question might appear to have a pre-set, equal weighting. This meant interviews, interviews based on a semi-structured arrangement giving scope to ask probing questions, follow-up questions, indirect questions and silence to elicit more detail where judged necessary or direct questions or structuring questions when it was time to move on (Blaikie, 2010; Kvale, 1996). This approach has made comparison slightly more challenging than, say, questionnaires but I feel it is truer to my objective of obtaining the view from the business. My aim was to get close to the respondents' meanings and interpretations (Blaikie, 2010), to get depth, to use the inter-subjectivity to encourage participants to shape their thinking in areas where they had perhaps not done so before.

This qualitative approach built around semi-structured interviews has been very successful in yielding a rich and pertinent array of data. I found from my very first discussions that participants quickly recognised the direction of my research and were more than ready with relevant input.

I considered other possibilities. For example, I considered using a self-completion questionnaire. This would have been easier, quicker and cheaper to administer, would have enabled me to reach a wider range of respondents and would have helped in the comparison of responses because of the strictly consistent format. I believe it would have been too rigid and constrained for my purpose, however, and it would have been almost impossible to ensure this attracted responses from my target group, senior company executives, those I considered best placed to take a strategic view from the business about the PFR.

I also considered using focus groups. A discussion amongst company executives might have helped unearth common factors and could have stimulated a deeper understanding of the topic and, therefore, a better quality of response. It would also probably have given me greater opportunity to explain the topic in more depth; answering questions that might not even come up in every one-to-one discussion but would benefit all to hear in an open forum. Focus groups can give complementary interaction (Kitzinger, 1994) and possibly greater depth and nuance and even consensus in some areas (Munday, 2006). On the downside, however, this would not give the individual firm's eye view for which I am searching; it might just have yielded a more bland, common denominator view, and it would have been difficult anyway to arrange. It was easier for me to find places in the diaries of busy company

executives for one hour, face-to-face meetings in their offices than to expect the executives to meet at a time and place set by me for a couple of hours or more.

Focus groups can also be quite high risk and, again in the context of my target group of participants, difficult to control. Focus groups can yield argumentative interaction (Kitzinger, 1994) which is not just between the interviewer and interviewee but also among the respondents (Ghauri & Grønhaug, 2005). The seniority and experience of those involved, the likelihood that some would already know each other, the differing personalities and the overall chemistry in such an elite group would make control difficult and feedback highly variable. The interviewer could be side-lined. Furthermore, if they were to go awry, there would not be a possibility for a second run.

There was also the danger of people being inhibited, reluctant to speak or reluctant to give other than accepted views, as noted by Bryman "... the fact that, in group contexts, participants may be more prone to expressing culturally expected views than in individual interviews" (Bryman 2012, p. 518). In this context with these participants, however, I think the danger was more likely to be a lack of inhibition.

The above notwithstanding, I did convene a meeting after finishing the first round of data collection for a small group of my interviewees to discuss initial findings. As Arksey and Knight note (1999, p. 33) interviewing is "...not an all or nothing decision; it is not the case that we use interviews *or* other methods. Better to consider interviews *and* other methods." This was very useful and stimulated some new thinking about the findings but, as anticipated, lacked the diversity and individual strength of opinion of the one-to-one discussions. Furthermore, and as alluded to above, only a small number of those interviewed were able to attend.

3.4.3 Interviewing: possible disadvantages

Semi-structured interviews present challenges, however, not the least of which has been to have the data coalesce into a meaningful, composite picture. I tackled this through introducing the new framework for analysis and through mapping the data on key factor radar charts. This has proved to be a very powerful way of visualising quite diverse responses. I have 29 strong, stand-alone stories about the subject that also intersect with each other at multiple, varied levels to give useful overviews by place, by type of business, by age of company and by other levels of aggregation.

Linked to this is the difficulty of making direct comparisons. Interviews can go in different directions, introducing new topics and neglecting to cover others, which makes it difficult to compare like with like. The main purpose of the data collection, however, was to open up

new avenues of discussion and thinking, to achieve a comprehensive and new picture rather than to compare responses to a pre-set list of topics. This drawback has had to be accommodated and, in fact, it did not prove as great an issue as might have been foreseen. There was considerable continuity in the topics covered, albeit with significant differences in emphases.

A further challenge lies in replicating my research method and results and, therefore, verifying their robustness. As Blaikie notes, "... social situations are never sufficiently similar, across space and time, to make replication possible" (2010, p. 217). Interviews are social situations and no two will ever be the same, even with constants in the interviewer and other factors. Again, however, having a coherent and consistent framework from which to map the results aids both replicability and variance testing and the overall methodology behind this is replicable and positively invites further research in this area to produce findings particular to different sectors in different places with different people. This research is about unearthing differences rather than proving consistency.

Using the interviews as both a means of collecting data and as a means to construct the framework for analysis, and thereby the loose interview template, does mean that later interviews may have been better scripted than the earlier ones. I have reviewed the transcripts with this in mind and indeed the structure of the later interviews was better, but I do not believe this significantly affected the content. I am confident all the interviewees were able to give their views on the subject in full and with their own emphases.

The selection of interviewees has been discussed above and it is clear that this focus on an élite group rather than, for example, a random and representative sample, is likely to produce bias. The interviewees were chosen because it is part of their job to formulate and implement strategy and there is the possibility that their responses on strategic issues like the PFR have been more professional than personal. This is consistent with the aim of the research, however, to get the view of the firm. Furthermore, given the seniority of those involved, there is likely to be a good convergence between personal views and organisational views. Their personal views will undoubtedly inform the corporate strategic viewpoint.

This notwithstanding, when it comes down to issues like relocation and quality of life there were some signs that respondents could see, and express, the corporate logic but that this did not align wholly with their personal preferences. Whilst, therefore, it can be assumed that there was this bias towards corporate views in many of the interviews and that this is a positive as the aim has always been to get the view from the firm, and the views of senior

managers have been recognised as the best proxies for this, it could be detrimental in the firm's own strategic analysis. Subordinating personal interests to a perceived corporate position may lead managers to under-estimate how strong these feelings are, not just in themselves but across all employees, and, therefore, lead to greater than expected resistance to corporate decisions. The rational view of the firm is not necessarily the view of all employees, even its most senior, when it comes down to decisions with significant personal and family repercussions. Put bluntly, less objective assessments can surface to block economically sound decisions regarding place, sometimes leading to inertia.

The nature of the selection, senior managers with a strong influence on strategy, inevitably led to bias in terms of race, age and sex. The interview cohort was primarily Scottish older men. This was not a function of the selection process it is a reflection of the reality of who occupies the senior positions in financial services companies in Scotland. For better or for worse, this also represents, therefore, the view from the firm as it relates to the PFR.

3.4.4 Form and content

All meetings and interviews were face-to-face and most took place during office hours at the interviewee's business premises in a private setting, usually a conference room. The mood was informal but business like. Interviewees were advised in advance that the meeting would likely take about an hour and the interviews were, by and large, completed in this time. They were undertaken in a relaxed and very open manner whilst still covering all the issues planned.

All but one of the interviews were one-to-one; the other involved two interviewees. I was the sole interviewer on all occasions. This added to the ambience of relaxed informality which I considered important to get broader views as opposed to stock answers.

I used a basic format for interviews and meetings covering an outline of my project, important formalities, including the signing of an Informed Consent form and obtaining permission to record the interview, introductions and a guide to questions to be covered. An example of the skeletal brief I used, as my own aide-memoire, is given in Appendix 2. The questions were linked to my research proposal and the themes I have identified as above. As noted by Mason (1996, p. 59):

"....the central issue in the choice of qualitative interviewing.....it is absolutely crucial that there is a logic – based on sound ontological and epistemological principles, and tied into specific research questions – to that choice, and it is a logic which guides the practice of interviewing and the process of analysis."

I was very clear in my mind as to what I wanted to cover but very flexible in how I went about it. I had a guide, the skeletal template, but this was never rigidly followed though all topics were addressed in the course of the interviews. My preference was always to lead off with a general question and allow the interviewee to dictate an order of priority of response. The checklist was adapted as the interviews progressed and I combined induction and deduction in an iterative process to produce the new framework for analysis

Despite, or perhaps because of, the unstructured approach common themes did emerge. It was not difficult to identify firms' broad priorities in terms of the PFR although these differed from firm to firm in actual and relative intensity as is revealed in the key factor mapping. Sentiment categorisation, described later, helped considerably in this context.

There were some surprises both in inclusion and omission but by the last interview I felt the content was becoming quite familiar, albeit in different contexts and with different styles of delivery. I felt the number and range of enquiries was sufficient to undertake the assessment of the material and subject.

One learning point I quickly picked up was that I got some good information on parting; final thoughts after the recorder was off. Rubin & Rubin give a good description of the stages of an interview (2012, p. 112) with the following advice with which I would concur:

"After you have finished with the formal closing, the interviewee may resume the more casual chatting that marked the opening. Sometimes what is involved is just friendly banter, but often what is happening is the interviewee is indirectly delivering additional information, so you should pay close attention to it, and write it down as soon as you leave, and look it over in conjunction with the interview."

This was certainly true on several occasions and I always spent time on my own after each interview on additional notes and reflections. The experience of the interviews did not change my ideas for the overall research programme and data collection based first and foremost on semi-structured interviews. There was undoubtedly a process of continuous learning over the programme which improved it but did not impact adversely on findings from earlier interviews and their validity for comparison.

3.4.5 Ethical issues

I carried out the University of Edinburgh Business School (UEBS) Ethics self-audit in relation to my research and no reasonably foreseeable ethical risks were identified. The only potential ethical issue could relate to confidentiality and I took pains to cover this in my

preamble to participants and with the Informed Consent form. I also explained, in relation to this form, my signed adherence to the UEBS Ethics Policy.

There was some sensitivity when discussion turned to the future and the political environment, particularly on the subject of Scottish Independence. One or two respondents took pains to note on this subject that opinions expressed were their own and did not represent a company view. In the main however, the interviewees seemed to welcome the degree of formality on the issues of ethics and anonymity preceding the discussions but did not appear to be much concerned whether they would be quoted or not. They were confident in their positions and their views suggesting they would not change these regardless of to whom and in what context they were speaking.

3.4.6 Data coding

I used two professional transcription service providers to produce written versions of my interviews which I then coded using NVivo Pro version 11, the latest version at the time of writing. I found this to be a very useful and powerful tool to assist analysis and presentation but, noting the reservations expressed by Hoover & Koerber (2011) and Paulus, Lester & Britt (2013), I have remained conscious throughout that I am dealing with a qualitative study, alert to the danger with the use of sophisticated technology for data analysis of drifting towards a quantitative and ritualistic style; of moving away from a constructivist or critical realist approach to a more straightforward realist view. I have been clear that the software has helped to show patterns and connections, but it does not show results.

NVivo 11 is a flexible system to facilitate the organisation of qualitative data and, more importantly, to facilitate the data interrogation from a great many different angles. I started using the system by loading some 500 pages of meeting notes and interview transcriptions as sources, including classification data for each source in terms of the name of the interviewee and the date, time and location of each interview or meeting. Each source was identified with a code depending on type, interview or meeting, and behind each source I logged case attributes for each interviewee, a list of which is given in Table 3-4 below. As mentioned earlier, having basic profiles of the interviewees opens up possible lines for later investigation, for example patterns related to age or nationality.

Table 3-4 NVivo 11 source case attributes

Sex
Age group
Country of birth
University 1
University 2
Company
Segment
Occupation

(Source: developed by the author)

I then went through each source line by line and chose relevant references for coding. As noted, the framework for the coding structure came initially from reflections on existing literature and theory but it evolved from there as a result of processing the data. It was necessary to introduce new categories and rethink the hierarchical relationships throughout. Although the overall research approach is inductive the creation of the coding framework, which led on to the framework for analysis, was essentially deductive, beginning with a template based on existing theory and literature and adapting, expanding and improving it to increase its relevance and validity (Finfgeld-Connett, 2013).

The interview responses were coded to 40 nodes derived from the framework for analysis described in section 3.3. The nodes are category and sub-category headings under which references to the same or very similar subjects are grouped. These nodes have then been aggregated up the three levels hierarchically; in other words the total responses logged against a level-1 theme equal the sum of all the related level-2 responses and the level 2 totals represent the sum of all level-3 responses, if any at that level. The derivation of the framework that yielded the nodes is explained in section 5.1 and the complete coding structure is given in Appendix 3.

3.4.7 The future

It was clear from the literature and from the interviews themselves that the PFR is never fixed in time. It will change, and sometimes adapt, in the light of the continually changing circumstances of both places and firms. To take account of this understanding the interviews and meetings were rounded off with a request to the interviewees to reflect on where they see significant opportunities and threats to their business, and especially to the PFR, in the future. To give this some shape and an opportunity for cross-comparisons, responses were

guided towards some or all of three topics, namely Brexit (the United Kingdom's plans to leave the European Union), the possibility of Scottish independence (IndyRef 2) and the growth of fintech (the increased application of new technological solutions in financial services). The intention was not to try and assess the impact of these developments on the companies in any detail but just to get an impression of the robustness of the PFR on the threshold of significant changes. The responses were also coded in NVivo under a different structure based on these three topics. The results of this area of data collection are discussed in section 5.8.

3.5 Sentiment Categorisation

3.5.1 Overview

Semi-structured interviews by their very nature comprise a lot more than a list of basic, uniform responses to a set of similar, closed questions. Responses are nuanced and amplified through the language used; through the adjectives and adverbs, through repetition, through sentence structure. The basic coding of references to themes illustrates the relative importance of topics based only on the frequency with which they are addressed. It does not capture the strength of feeling behind a statement or even whether it was positive or negative. It is a building block for constructing the overall framework for the PFR but it does not serve the purposes of this research, where the aim is to get the view from the firm of how place contributes to competitive advantage.

It was clear in the interviews that in some areas the interviewees perceive competitive disadvantages as well as advantages and that there are some factors they feel more strongly about than others. In a refinement to the coding system, every reference has been adjusted accordingly on the basis of sentiment categorisation. There is considerable academic support for data sentiment analysis and categorisation, mostly involving relatively sophisticated computer programmes and masses of news and social media data (Khoo, et al, 2013; Ahmad, 2011). There is also a sentiment classification facility in a premium version of NVivo 11 (Hai-Jew, 2017). Given the qualitative nature of this research and the emphasis on depth and interpretation rather than breadth and statistical convergence a simpler, bespoke classification system has been used. This involves attaching a score to every reference based on the scale shown in Table 3-5 below. These scores have been added up to give weighted scores per category at all levels and these weighted scores have been aggregated and represented in various ways on key factor maps to inform the interpretation of the data. This is not a route to a quantitative evaluation. It is an essential aid to giving a better

understanding of the qualitative data which means more value can be extracted from it and more meaningful patterns can be derived.

The fact that the study is set in two cities, geographically and culturally quite close to each other, presents advantages and disadvantages in this context. On the latter side to start with, the results could be depressed or inflated by particular national characteristics. Scots have a reputation in some quarters for being rather dour, for tending to exaggerate the negative side of things. This could mean that, compared to respondents from cities in California for example where people are reputed to have a generally rosier view of life, there could be an undue negativity in the responses. As we are looking at relative scores rather than absolute though, this is unlikely to have produced significant bias in the results. At the same time, studying two cities in one area has the advantage of helping to neutralise neutralising any over-riding national or macro-economic concerns in the results which is consistent with the earlier conclusion that competitive advantage attributable to the PFR primarily relates to local factors.

Table 3-5 Sentiment categorisation

Score	Title	Descriptive	
2	Important and positive	Critical. Important and positive. Offered early and unprompted. Repeated reference. Prime motivator.	
1	Advantageous	Advantageous factor. Needed but not a major differentiator. Could be decisive in a close decision about location.	
0	Neutral	Statements not selected for coding.	
-1	Deficient	Negative in relation to Edinburgh and/or Glasgow. Actual disadvantage. Falls short of requirements in this area.	
-2	Seriously deficient	A major drawback in the location that must be remedied or will cause a firm to relocate or at least redistribute resources.	

(Source: developed by the author)

An overall picture has, therefore, been built that is indicative of the frequency with which a topic is mentioned combined with an assessment of the feeling behind the references. Each reference receives a score of 2, 1, -1 or -2 depending on its categorisation. Statements not selected for coding at all are effectively classed as zero or neutral. It is possible, though

exceptional, for references to fit more than one category if in the same short phrase an interviewee has addressed both the pluses and minuses of a feature.

3.5.2 Examples

The examples used are taken from two sub-categories *Ease of business - transport* and *Talent - quality*.

Important and Positive (Score 2)

This category is reserved for statements that clearly stand out in a positive way. The reference will convey a sense that, relative to all other points made, this is crucial or at least very important.

“...how do we get to Scotland airport? 15 minutes away, massive plus, no doubt, people comment all the time 'Can't believe how close we are to the airport'” (I22).

“I think Scotland's ability to produce large numbers of what we call fund professionals is a huge strength” (M8/I12).

“...we've got actuarial expertise in Scotland which is second to none, it's all there” (I6).

Advantageous (Score 1)

The reference is positive but with limited qualification.

“...in terms of overall infrastructure, north, south, the train stations, the bus services right past here, it's a positive” (I22).

“So, the fact that we are well connected to London as a hub makes Glasgow a reasonably attractive pole position ” (I29).

“The other thing, interestingly, is Scotland copes better with worse weather and people tend to have an appetite to get in the office. Quite frankly I've been to London when there's about half an inch of snow and you would think the place had shut down” (I20).

Deficient (Score -1)

This is the classification for negative comments on a topic.

“In terms of our communications being well in excess of what's available in Germany or Luxemburg or France? I would say we couldn't say that” (I27).

“There are certain skill types that we do struggle with” (I18).

"I do think that the Scottish attitudes to business, there is a lack of confidence that I see in Scottish people" (I18).

Seriously deficient (Score -2)

This category is for comments that are so negative they highlight action is required.

"I think that the train connection between Glasgow and Edinburgh is a joke. It should not take to go from two close very large urban areas, one of which is the capital and the other is a bigger city, as long as it does to get between them"(M10/I19).

Double coding

Some longer references may be coded more than once. Two examples are given below.

"...it's probably the easiest airport to office journey I've ever made. It's a massive tick from that perspective. Negative tick is that flights out, unless you want to go to London, once a day to New York, everywhere else it's a holiday place" (I22).

"I think the biggest competitive advantage is effectively the qualified base of financial professionals here. And in that respect, I would caveat that by saying that although that's a strong competitive advantage it's not one that is sustainable in its own right without additional links to make something a success as a financial area" (M10/I19).

These were both coded *Important and positive* for the first part and *Deficient* for the second. They could have been logged as two quotes each, but it was felt better to keep the sense of balance, of trade-off, conveyed by the interviewee. The weighted score would, of course, turn out the same either way as +1.

3.5.3 How it works

The following screenshot, Figure 3-5, looks into the coding category *City character and culture*, a sub-section under the theme of *Quality of Life*. There were 64 references to the importance of city character and culture in relation to quality of life in the cities. Of these, 13 were considered *Important and positive* scoring 26. Forty-two of the references were classified as advantageous, city character and culture is a good though not critical aspect of the PFR, scoring 42. There were 9 references suggesting that the cities were deficient in this area, that the character and culture actually detracted from the possible advantages of the location, scoring -9. There were no references sufficiently negative to warrant a score of -2. The net score, therefore, was overwhelmingly positive on this factor, being 59 (26+42-9),

though interestingly this score was less than the total number of references (64) indicating the reservations expressed by some on this subject.

+	+	Ease of doing business	32	362
+	+	Talent	30	553
-	+	Quality of life	30	191
+	+	Affinity	17	34
+	+	Cost of living	12	16
-	+	City character and culture	22	64
	+	Important and positive	8	13
	+	Advantageous	18	42
	+	Deficient	7	9
	+	Seriously deficient	0	0

Figure 3-5 NVivo coding screenshot, sentiment categorisation
(Source: developed by the author)

3.5.4 Control experiment

To test my application of this categorisation I enlisted the assistance of several PhD researchers at UEBS. I briefed three colleagues on the background to the project, on the use of NVivo and on the approach to sentiment categorisation. I asked them to do the sentiment categorisation on a tranche of 104 references taken from a sub category at random using the guidelines given above. I then compared their sentiment categorisations with mine. Overall 65% of the researchers' sentiment coding exactly matched those done already. I ran an SPSS **Reliability Analysis** on the data comparing my coding with that of the three volunteers with the following results, Table 3-6 below, for the intraclass correlation coefficient (ICC), a measure of internal consistency across raters (Shrout & Fleiss, 1979).

Table 3-6 Inter Rater Reliability Test

95% Confidence Interval			
	Intraclass	Lower Bound	Upper Bound
	Correlation		
Average Measures	.904	.870	.931

(Source: IBM/SPSS)

A coefficient above 0.9 represents very strong positive correlation and is, therefore, supportive of the sentiment categorisation method.

3.6 Visualisation and Interpretation

3.6.1 Overview

I focused on 29 organisational views (30 managers were involved but one interview was with two respondents) for further analysis and I chose the NVivo 11 software system to code the data. The research is focused on views of the PFR today but there was also useful comment about the evolution of the PFR which was extracted and grouped and used to inform Chapter 4 following on the historical context. I also steered interviewees to offering comments on their views of future challenges and these comments were extracted and logged separately as will be discussed later in section 5.8. The meat of the research lies in the references relating to the PFR today which have been coded across 40 nodes in NVivo which, in turn, derive from the framework for analysis.

The qualitative research data have been coded to the framework for analysis, scored for sentiment, and mapped on to radar charts to help with the analysis. I have preferred to use radar charts for this visualisation because they best portray the view from the firm. The firm sits at the centre of the various place forces which affect its strategies for competitive advantage to various degrees as represented by the shape of its unique profile in the chart. Bar charts and graphs have been used in other analyses, for example in time series and more quantitatively based representations.

In terms of the current profile of the PFR, I have compiled a high-level chart for every organisational view involved showing the weighted scores for each of the main themes in relation to the total for that organisation. I have then aggregated these 29 charts in various ways to determine patterns. Figure 3-6 below shows an example of the resulting visualisation for a retail bank.

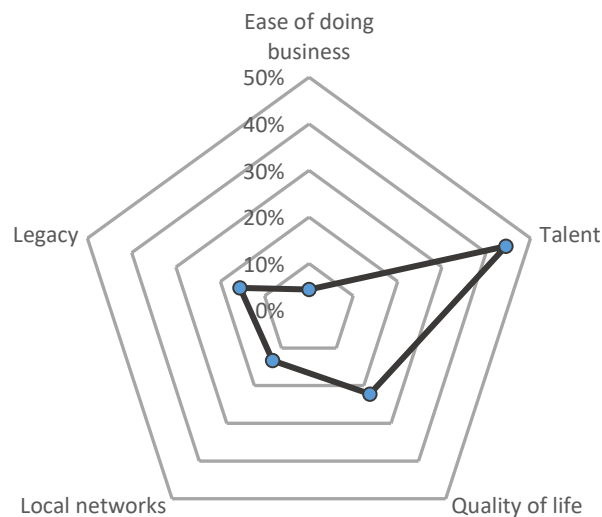


Figure 3-6 Example retail bank PFR, proportions of total score, level-1
(Source: developed by the author)

This shows that in this particular case *talent* is by far the most important factor in the PFR with 42% of the total weighted score followed by *quality of life* with 22%. Figure 3-7 following shows the overall picture for all interview references across the five main themes by aggregating all the charts.

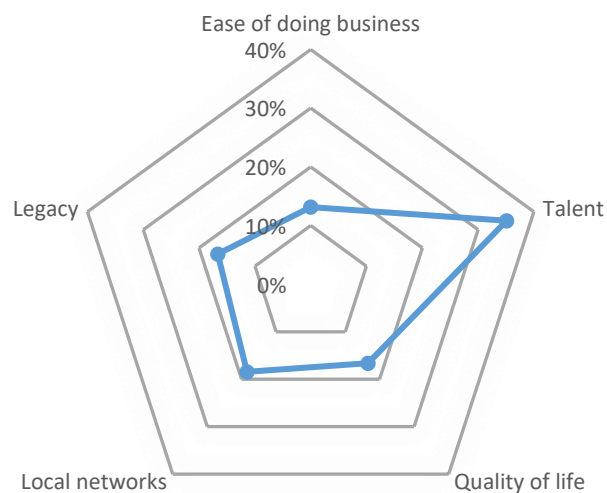


Figure 3-7 All responses PFR, proportions of total score, level-1
(Source: developed by the author)

Again, *talent* is clearly the most significant theme in the PFR with 35% of the total weighted scores followed by *local networks* with 18%, almost on a par with *legacy* and *quality of life* each on 17% and *ease of business* on 13%.

3.6.2 Comparisons

This method of visualisation also facilitates comparisons of different organisational views and different aggregations. Figure 3-8 below shows the split between Edinburgh and Glasgow for the total weighted scores. This illustrates a digression from the overall pattern with a more outstanding primacy for *talent* amongst the Glasgow respondents and more of a balance in Edinburgh between *talent* and *legacy*.

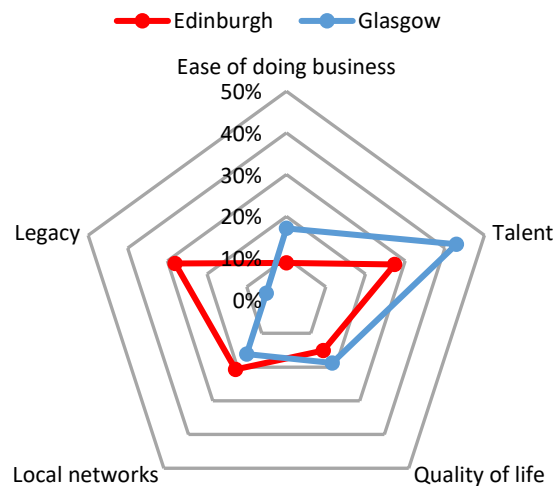


Figure 3-8 Edinburgh and Glasgow PFR, proportions of total score, level-1
(Source: developed by the author)

Figure 3-9 following shows the overall picture for retail banks together with sectional splits comparing those present in the cities before 1960 and after 1960.

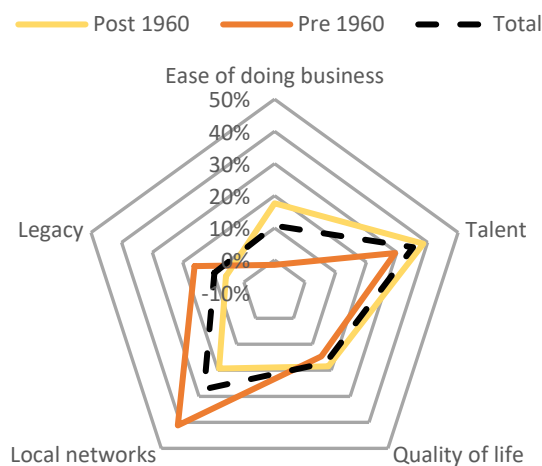


Figure 3-9 Retail banks PFR, proportions of total score by time in city, level-1
(Source: developed by the author)

This shows that the longer established banks in the cities value local networks more than the more recent arrivals, which set greater store by the availability of talent.

These interview maps simplify the comparison of qualitative data across many different lines of enquiry. Sample sizes can be as small as one interview or meeting and, of course, the number of references from each meeting varies considerably. These charts are not representative of any statistical trends but merely aids to visualisation.

3.6.3 Level-2 analysis

This approach to assisting in the interpretation of the data can also be extended to portraying findings from the lower levels of coding in the framework for analysis. The 29 organisational views comprised 22 firms, 5 BSOs and 2 universities. Figure 3-10 below shows the level-2 configuration for *quality of life* comparing firms with BSOs.

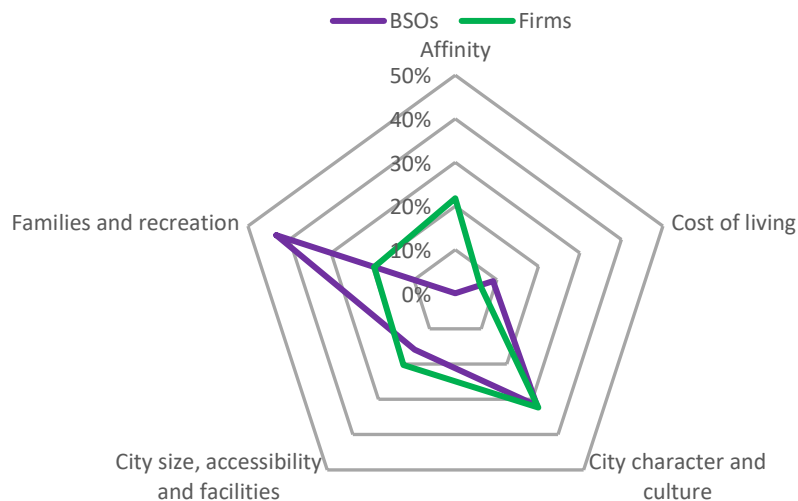


Figure 3-10 BSOs and firms, proportions of quality of life scores, level-2
(Source: developed by the author)

This shows that at the level-2 categorisation for *quality of life* the BSOs suggest the most important consideration is *families and recreation* whilst those responding on behalf of the firms have a more balanced outlook overall but with a tendency towards *city character and culture* followed by *affinity*.

I have considered around 100 different charts to show comparisons looking at different factors across different types of financial services businesses, in the different cities, with different durations in situ, with different interviewee profiles, to different levels of detail in a host of different aggregations. This illustrates how for the first-time individual profiles can be identified and aggregated in different combinations to indicate patterns of

understanding. Inter-firm, inter-sector and inter-location comparisons can be made as well as, potentially, comparisons over time and across different industries.

3.7 Methodology Summary and Conclusions

This research uses mixed methods with quantitative data analysis behind the selection of successful places and successful industries, a mixture of quantitative and qualitative data to select successful firms and qualitative data from semi-structured interviews to inform both the finalisation of a new framework for analysis, incorporating also input from the literature review, and the analysis itself. The analysis and visualisation have been accomplished employing NVivo coding, based on the new framework and adjusted for sentiment analysis in a novel and bespoke manner, and the projection of the results on to factor maps.

This novel combination has proved most effective in both the construction of this new and comprehensive model for the PFR and the application of said model to the particular case of financial services in Edinburgh and Glasgow. The full analyses of the new framework, the new model and this study are taken up in Chapter 5. Chapter 4 following focuses on the wider context of the empirical study, the PFR behind successful financial services business in Edinburgh and Glasgow, to support a better-informed interpretation.

4 The Financial Services Industry in Edinburgh and Glasgow

Where you start from is crucial in life and in business. In life, you have no choice but there are options if you are starting a business. Few entrepreneurs starting new companies appear to analyse these options in great detail, however, and most start businesses where they live, or at least in a nearby city, and develop a reluctance to leave. Whilst this may not be rational it is common, noted for example in the research by Oakey et al mentioned earlier on high-technology small companies (1988). Chance, path dependency, history and tradition are all factors that play a part, therefore, in business success and early cluster development.

In this research, these effects have been considered specifically under the *Legacy* theme outlined in section 5.1.6 following. This chapter gives a brief and general description of the history of the financial services industry in Edinburgh and Glasgow to add background to this theme in this study. It describes an industry with a long history marked by turbulence, great success, the occasional failure, and waves of innovation. It has been an important industry, particularly in Edinburgh, for more than 300 years and is bigger now than it has ever been despite the international financial crisis of 2007-8.

Much of the information here came from the interviewees themselves, supported and verified by literature and web searches. Several of the respondents were very well informed as to the history and development of financial services, particularly in Edinburgh, though the precise timeline was developed by the author from literature and company web sites.

4.1 Beginnings in Edinburgh

The Bank of Scotland (BoS) was founded in Edinburgh in 1695 when the city was still the capital of an independent country, albeit sharing the monarchy of William and Mary with England and Wales. Edinburgh was the centre for politics and the law and with these came the landowners and capital needing financial services, (Fry, 2009).

The Act of Union of 1707 forged the political connection of Scotland and England and saw a significant shift of power and interest south. This was far less than might have been imagined however and, in the light of popular opposition to the Union, the Government in London generally adopted a policy of changing as little as possible in Scottish administration. In fact, “several of the clauses of the treaty were devoted to safeguarding the vested interests of those social groups who mattered in Scotland” (Devine, 2006, part 1, ch. 1.2, loc. 345). This proved to be extremely important for the evolution of financial services in the country.

Retaining clearing banks for example, the only ones in the UK outside London, gave the Scottish cities privileged positions compared to banks in the English cities.

On top of this, a considerable sum of money was transferred to Scotland as an *equivalent* for loss of taxes, to cover the liability for English debt and partly to compensate leading figures for losses in the Darien scheme, Scotland's ill-fated project to set up an entrepôt on the isthmus of Panama. More significantly for the longer term, Scotland was given access to free trade with England and her colonies. The Union, a potentially crippling blow to the nascent financial services industry, actually turned into a great source of strength in underwriting separateness whilst injecting capital and revenue and opening up tremendous trading opportunities.

The Royal Bank of Scotland (RBS) was founded in Edinburgh in 1727, largely with *equivalent* money and tacit Government support to give the Whig sympathising professional class an alternative to the Tory (and possibly pro Jacobite) BoS (Martin, 2014). Both banks went on, through a combination of bitter rivalry and enlightened co-operation, to dominate the Scottish financial world until the crash of 2007-08 and did much to establish a reputation for Scots as canny and innovative financial managers, a reputation arguably well supported by the Protestant work ethic, high rates of literacy, more university places per head than other European nations and the thinking of the Scottish Enlightenment (Herman, 2001).

4.2 The Rise of Glasgow

Glasgow in particular benefited from access to British colonial trade after the Union, especially trade in tobacco and cotton which, in turn, translated into industrial growth. By the late nineteenth century the city was widely hailed as the workshop of the Empire (Devine, 2003; Herman, 2001). As the critical mass of the Scottish economy moved westwards so did interest in financial institutions and the Ship Bank (1750 - 1836), the Arms Bank (1752 – 1793) and the Thistle Bank (1761 – 1836) opened in the city with support from tobacco money. Having initially supported these banks BoS and RBS decided, not for the first time, to put aside their rivalry and to co-operate to see off this competition. This included RBS opening a branch in Glasgow in 1783 and BoS doing likewise in 1787. The Ship and Thistle Banks survived through amalgamations, however, to eventually join Glasgow's Union Bank which operated until its merger with BoS in 1955 (Fry 2017, 2009; Martin, 2014; Perman, 2013; Devine 2006,2003).

Other banks also came and went, including the Western Bank which was founded in 1832 and collapsed in 1857 and the City of Glasgow Bank, founded in 1839, which collapsed spectacularly in 1878. Not all ventures in the west failed or were absorbed. The Clydesdale Bank, founded in Glasgow in 1838, has lived through various guises, acquisitions and mergers to challenge the dominance of the two Edinburgh giants to this day and has retained its cherished note issuing powers. Overall though, the Edinburgh banks managed to protect and extend their dominant position in Scotland through waves of amalgamation, banking crises and new ventures and this has contributed significantly to the eastern city's financial legacy. In Glasgow, trade and heavy industry have been far more central to commercial life over the last three hundred years giving a different legacy, based on competitively priced technical skills, to the more recent renaissance of financial services in the city.

4.3 Growth and Innovation

4.3.1 Banking

The big two banks have always been at the heart of Scotland's finance industry and reputation and have spawned other financial services and support businesses. Although dominating the Scottish landscape, however, they have always had to work hard, to innovate and to expand to compete at the United Kingdom level and then globally. The rivalry between the two, seen for example in the takeover of NatWest Bank by RBS in 2000 (Martin, 2014; Perman, 2013), did much to drive success and competitive advantage. Before its collapse in 2008, RBS had risen to be the fifth largest bank in the world by market capitalisation (Martin, 2014).

As noted though, co-operation was also a feature of success and the Committee of Scottish Clearing Banks has provided a forum for the main banks to share their interests since the 1740s. Cohesion has also come from institutions like the Chartered Institute of Bankers in Scotland, the oldest professional banking institute in the world, founded in 1875 to set standards for the industry. This mix of competition and collaboration, including a strong role for institutions, has been a constant thread, reflected through to the current study.

The pressures to survive with a small market base, on the edge of Europe in an increasingly globalised and consolidated industry, have also prompted significant innovation. BoS was the first UK bank to introduce electronic banking in 1985 (Perman, 2013) as it strove to extend market reach in England without establishing a branch network. In the same year RBS was the first to introduce a telephone only insurance service through its Direct Line subsidiary. The banks had to take risks to stay ahead. RBS was, effectively, the first bank to allow

overdrafts. BoS was a long-time leader in innovative corporate financing and highly leveraged buy-outs. Both banks were pioneers in extending their potential customer bases through links with supermarket chains; BoS with Sainsbury's in 1997 and RBS with Tesco in the same year.

Competition, co-operation and innovation within the confines of the city of Edinburgh lay behind a remarkable expansion that spread beyond banking in building up a financial skills talent pool and a specialist support services infrastructure, for example in mergers and acquisitions law and accounting, that became sources of competitive advantage in their own right. As noted by an Edinburgh professional services partner (M8/I12):

"..it (M&A and MBO activity) gave the Edinburgh and Scottish based professionals the opportunity to be the work generators. And where they were sitting in national or international institutions, the businesses like the big four accounting firms, that would enable the Scottish offices to punch above their weight basically within their organisations. Because they might win work which might then be carried out by other parts of the firm."

4.3.2 Savings banks and life insurance

Alongside commercial and retail banking Scots were pioneers in other areas of financial services. The Reverend Henry Duncan is credited with founding the first savings bank at Ruthwell in Dumfriesshire in 1810. This was based on long debated principles around encouraging thrift, particularly amongst the poor, and on various other initiatives including Friendly Societies at the end of the eighteenth century and the beginning of the nineteenth. It was the model for the proliferation of savings banks across the United Kingdom that culminated in the fully fledged commercial bank, the Trustee Savings Bank (TSB) which, after various corporate mutations, has recently returned to independence and an Edinburgh base (Moss & Russell, 1994).

In a similarly philanthropic vein and with even greater long-term significance for Edinburgh and Glasgow was the Church of Scotland Ministers' and Scottish University Professors' Widows' Fund. This was established in 1743 primarily by two energetic Scottish clergymen, Robert Wallace and Alexander Webster. It too built on other ideas and schemes in the period for helping widows and orphans but the attention given to actuarial analysis in this case made it the first viable model for life insurance and the basis for a major Scottish financial industry (Dow, 1972). The Scottish Widows' Fund and Life Assurance Society was established in Edinburgh in 1815 as Scotland's first mutual life office to offer assistance to the dependents of those killed in the Napoleonic Wars. This was soon followed by Standard Life,

also in the capital, in 1825. Scottish Amicable in Glasgow in 1826, Scottish Equitable in Edinburgh in 1831, Scottish Provident in the same city in 1837, Scottish Friendly Assurance in Glasgow in 1862, Scottish Life in Edinburgh in 1881 and Scottish Mutual in Glasgow in 1883 (Moss, 2000). The business boomed in both cities obviously building on a Scottish national brand reputation and a readiness to diversify into overseas markets, into pensions and into investment management with uncannily propitious timing.

As with the two big banks the Scottish insurance giants, especially Scottish Widows and Standard Life, competed fiercely but collaborated as well through, for example, the Association of Scottish Life Offices from 1840.

4.3.3 Investment trusts

Investment trusts were not invented in Scotland, but they quickly opened another chapter in financial services growth and innovation. The first such investment vehicle in Scotland was started in Dundee by Robert Fleming in 1873, the Scottish American Investment Trust (SAIT), based on money from whaling (Fransman, 2007). This was quickly followed by the Scottish American Investment Company (SAINTS) founded in Edinburgh by William Menzies. The industry developed rapidly on the back of a good reputation, shared with banking and insurance, for the reliable custodianship of assets over the long term and a willingness to invest in far flung markets. Investment management grew alongside the existence of the trusts and produced several outstanding investment managers including firms like Martin Currie (1881), Alliance Trust (1888), Ivory & Sime (1895), Murray Johnstone (1905) and Baillie Gifford (1908).

The business spread across Scotland but was particularly concentrated in Edinburgh, where capabilities very quickly outstripped local investment needs and began attracting capital from throughout the United Kingdom and abroad. It, thus, grew out of all proportion to Scotland's financial requirements as an arm of financial services to rival banking in its impact and global reach if not its scale. In 1931, 38% of total investment trust business for England and Scotland was done in Scotland where the industry, although small in comparison to mainstream banking, led in the investment of UK capital overseas (Fransman, 2007).

4.4 Evolution and Resilience

Figure 4-1 below shows a timeline for the development of financial services in Edinburgh and Glasgow. The legacy stretches back over 300 years as noted and shows distinct phases of the industry being reinvigorated by extension into new activities, from banks to life insurance to

investment trusts to asset management to, more recently, shared services. No activities have disappeared, but many companies have come and gone, and fortunes have risen and fallen. The places have remained resilient despite the vicissitudes of the industry though the hiatus in Glasgow from the mid-nineteenth century to the later twentieth century is clearly visible.

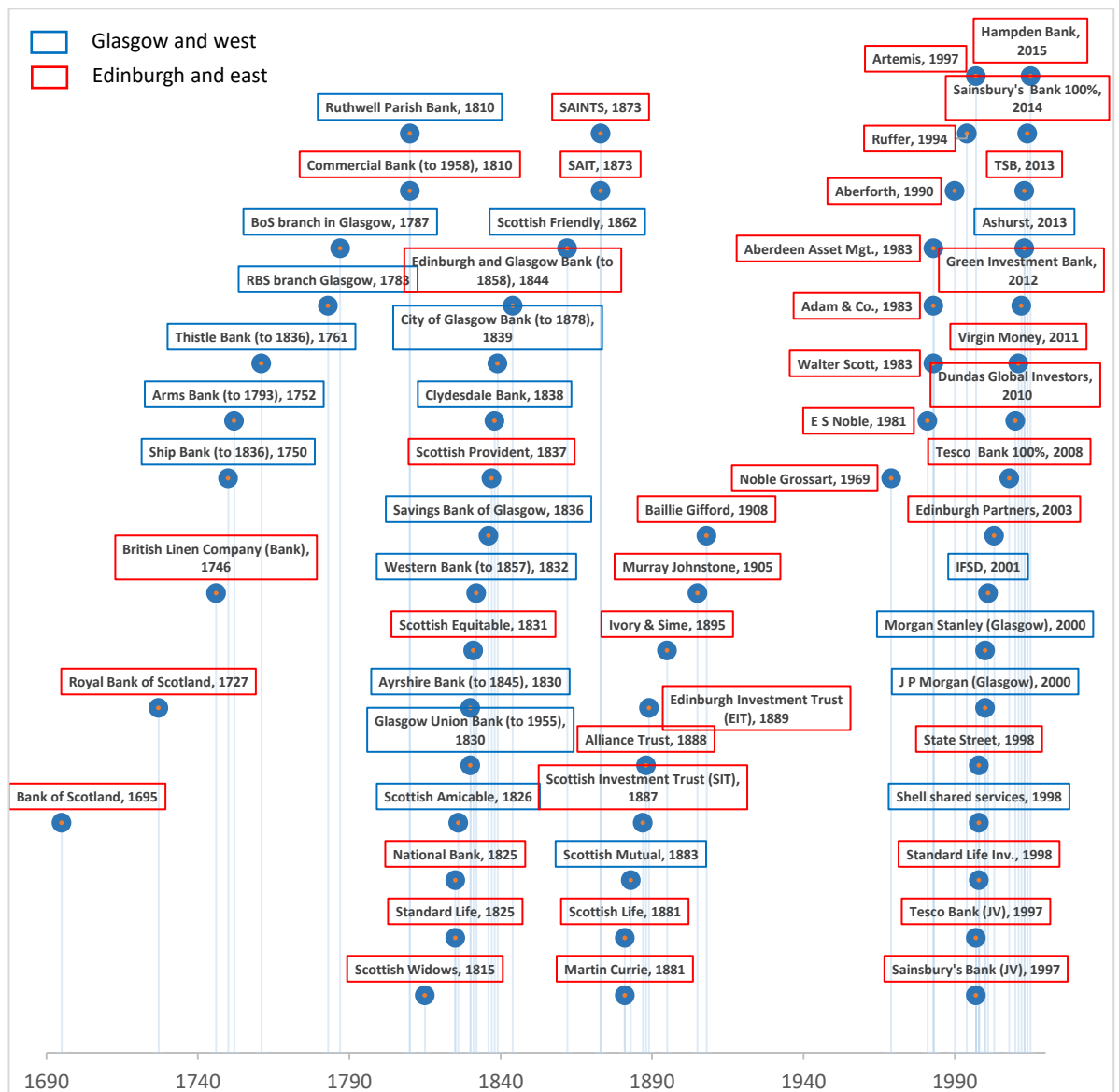


Figure 4-1 Timeline of Edinburgh and Glasgow financial institutions
(Source: developed by the author from interviews, written histories and company web-sites)

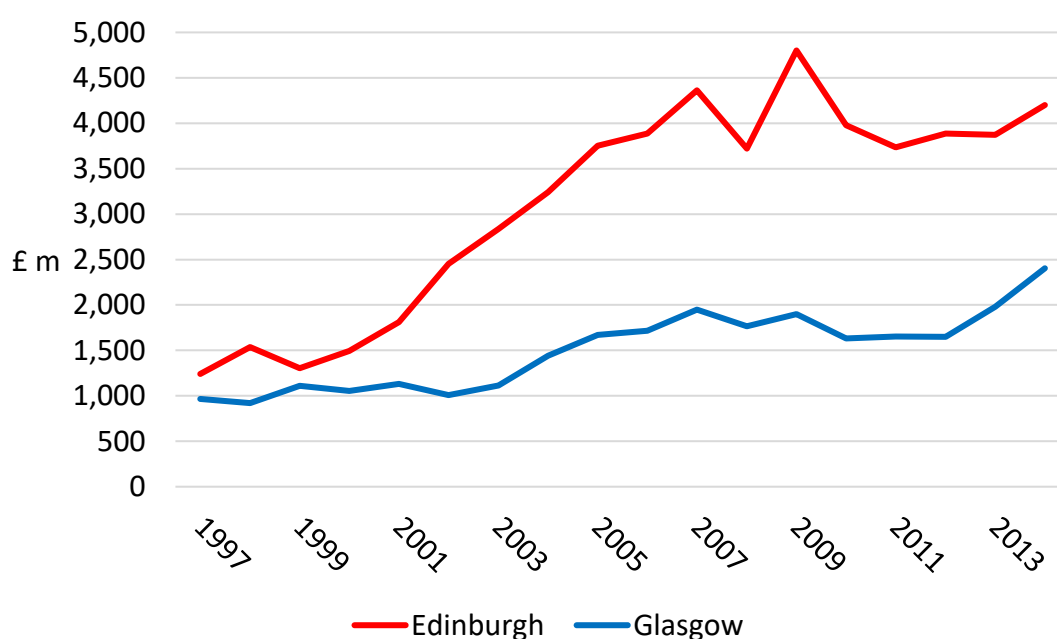
Scotland, as a relatively poor country next to a rich neighbour and on the fringe of Europe, has been forced to be inventive in financial services (Fransman, 2007; Devine, 2006; Checkland, 1975). Many of the features related to successful cities and clusters in successful place-firm relationships have been evident in supporting this, including the power of both local rivalry and co-operation, the development of institutions, innovation and the

development of talent. This latter aspect has been greatly assisted by the quality of the Scottish education system, in both schools and universities, and a cultural background emphasising the work ethic and personal responsibility. There have also been many remarkable individuals leading the firms and the cities, usually with strong, clear, inventive strategies, and support has come from the development of institutions to buttress good governance as well as industry development and reputation.

4.5 Financial Services Today

Figure 4-2 shows how the evolution of financial services has been reflected in the city economies of Edinburgh and Glasgow in terms of the GVA contribution. The industry is worth over £4 billion in Edinburgh and £2.5 billion in Glasgow (ONS, 2015).

Within a generally rising trend, albeit at current basic prices, the effects of the 2007-08 global financial crisis are clear interruptions to healthy growth in both cities, but particularly in Edinburgh.



*Figure 4-2 Finance and insurance activities GVA growth, Edinburgh and Glasgow
(Source: developed by the author, with data from ONS, NUTS3)*

Table 4-1 below summarise how the cities compare in terms of financial sector jobs and current economic contribution.

Table 4-1 Edinburgh and Glasgow financial services employment and contribution, 2017

	Banking	Insurance	Fund Mgt.	Other	Accounting	Mgt. Consult.	Legal Services	FS Total	City Total*
Employment									
Edinburgh	20,000	7,250	4,000	3,055	4,500	5,000	6,000	49,805	354,000
Glasgow	8,000	8,250	175	6,380	5,000	3,500	5,000	36,305	434,000
GVA (£ mln)									
Edinburgh	2,055	1,336	119	656	207	144	276	4,792	36,963
Glasgow	1,101	716	64	351	166	116	222	2,737	32,305

(Source: TheCityUK <https://www.thecityuk.com/assets/2017/Reports-PDF/UK-based-financial-and-related-professional-Services-Enabling-growth-across-the-UK.pdf>. *Source ONS NUTS3, GVA at local area level 2016)

Financial services in Scotland contribute 9.3 % of total Scottish GVA. Edinburgh specialises in banking, life assurance and pensions, investment management and asset servicing. Glasgow specialises in general insurance, accountancy and legal and other support services (TheCityUK, 2017).

4.5.1 Banking

With global consolidation in the industry the major banks had to expand or be absorbed but, ultimately, over-extension brought down both RBS and BoS at the time of the world financial crisis in 2007-08 (Perman, 2013; Martin, 2014). Remarkably, however, although this has been a shock locally, the industry is once more adapting to opportunities with the growth of new, challenger banks like Tesco, Sainsbury's and Virgin Money; with the expansion of operational centres for international banks like J P Morgan, Morgan Chase, Barclays, BNP Paribas and HSBC and with the establishment of new, niche banks like Hampden and the Green Investment Bank. Even as the strength and consistency of individual firms has waxed and waned the resilience of the places has survived.

4.5.2 Insurance

Changes in the life insurance and pensions sector have been perhaps even more dramatic with the loss from Scotland of practically all head offices except for Standard Life, which itself has metamorphosed into being as much an investment management business as a company centred on life insurance and pensions and has merged with Aberdeen Asset Management. Table 4-2 below summarises some of the changes. Although many "Scottish" brands remain the hearts and minds of the companies have largely left the country. The fact that there has been no consolidation of the smaller companies into a Scottish industry giant is suggestive of the rivalry amongst the different companies being at least as strong as – or perhaps stronger than – the willingness to co-operate.

Table 4-2 Edinburgh and Glasgow insurance companies

	Founded	City	Takeover/ Merger	Now
Scottish Widows	1815	Edinburgh	2000	Lloyds
Standard Life	1825	Edinburgh	2017	Merger with Aberdeen Asset
Scottish Amicable	1826	Glasgow	1997	Prudential
Scottish Equitable	1831	Edinburgh	1998	Aegon
Scottish Provident	1837	Edinburgh	2008	Royal London
Scottish Friendly	1862	Glasgow		
Scottish Life	1881	Edinburgh	2001	Royal London
Scottish Mutual	1883	Glasgow	2008	Royal London

(Source: developed by the author with information from company websites)

As in banking, however, Glasgow in particular has attracted more recent inward investment from international insurance companies like Chubb and AXA to offset some of the loss of home-grown businesses.

4.5.3 Investment management

There have been long and strong connections between life insurance and investment management, a sector that has remained very strong in Edinburgh but has undergone similar changes to banking and insurance. The vitality evident in this sector disguises a potentially destabilising trend towards subsidiary operations as opposed to head offices as can be seen in Table 4-3 following.

Figure 4-3 Investment management businesses

	Founded	City	Takeover /Merger	Now
Martin Currie	1881	Edinburgh	2014	Legg Mason (US)
Ivory & Sime	1895	Edinburgh	1998	Friends Ivory & Sime
			2004	F&C asset Mgt. BMO (Montreal)
Murray Johnstone	1905	Glasgow	1993	United Asset/Old Mutual
			2000	Aberdeen Asset
Baillie Gifford	1908	Edinburgh		
Walter Scott	1983	Edinburgh	2006	I&S spin-out. BNY Melon
Aberdeen Asset Management	1983	Aberdeen	2017	Standard Life Investments
Stewart Ivory (SAINTS)	1985	Edinburgh	2000	Commonwealth Bank of Australia
Aberforth	1990	Edinburgh		I&S spin-out
Ruffer	1994	Edinburgh		
Artemis	1997	Edinburgh	2002	I&S spin-out. ABN Amro/Fortis/AMG
Standard Life Investments	1998	Edinburgh	2017	Merger with Aberdeen Asset
Edinburgh Fund Managers	1998	Edinburgh	2003	Aberdeen Asset Mgt.
Edinburgh Partners	2003	Edinburgh		
Dundas Global Investors	2010	Edinburgh		Walter Scott spin-out

(Source: developed by the author from company websites)

Whilst internationalisation can undoubtedly bring benefits in improved global connections the loss of head offices, the moving away of decision-making capabilities, could be cause for some concern as will be explored later in this study. Edinburgh's New Town still holds its mystique for this business, however, and a certain aloofness from the frenetic pace, gossip and short-termism of The City in London that permits a focus on quality over quantity.

4.5.4 Glasgow's International Financial Services District (IFSD)

The IFSD is a public-private partnership established in Glasgow in 2001 to offer financial services companies a quick and easy route to setting up new UK offices. It originally occupied a designated area of around one square kilometre near the centre of the city and is designed to promote urban regeneration, to attract new jobs and to develop Glasgow's status as a financial services centre. It has subsequently expanded in area and currently hosts operations from firms including J P Morgan, BNP Paribas, Morgan Stanley, esure, AXA, Tesco Bank, the Student Loans Company, Barclays, HSBC, Santander and Clydesdale Bank. It has attracted completely new business as well as removals from other parts of the city and

expansion of existing operations. The Association of Chartered Accountants (ACCA) is also based in the district.

The public sector partners are Scottish Enterprise, Glasgow City Council, the Scottish Government, Scottish Development International, Invest Glasgow and Skills Development Scotland. The industry body Scottish Financial Enterprise is also involved. In addition to access to custom built facilities there is possible support through Regional Selective Assistance grants, training, recruitment, business promotion, networking and overall account management (IFSD, 2017).

This is a major government and agency led initiative that has significantly helped Glasgow in its financial services cluster development in recent years. It covers a wide range of financial services and supporting activities but is characterised by the large support offices for international banks. As well as direct public sector support it involves several private sector partners, for example in property development and communications, and stresses close links with local universities and colleges and with the extensive local transport network.

4.6 Conclusion

The Scottish financial services industry has evolved through a cycle of innovation and adaptation from banking into insurance into pension provision into investment trusts into asset management into wealth management and, more recently, into shared services. The two cities have been the crucible for this evolution, retaining their separate identities and building a foundation in financial skills that has used a peculiar Scottish combination of confidence and conservatism in financial management to adapt to changing fortunes and capitalise on opportunities. This history has been marked by a number of key individuals who have been able to recognise these opportunities and the need to adapt to survive as relatively small players in a small country on the fringe of Europe. The PFR cannot be explained by geography alone. Far from it, it is the combination of economic, social, cultural, historical and other locational factors with human agency at crucial points in time. It is an evolutionary story that embraces both economic geography and strategic management.

Many features of cluster development have been evident although not necessarily consistent. The transfer of ideas and knowledge arising just from both formal and informal proximity (knowledge spill-overs) has clearly been important, both in the guise of competition and of co-operation. The hub and spoke effect of major companies in banking, insurance and investment management has been crucial. The flexible and adaptable talent

pool backed by a strong educational system that has been able to take a world view whilst staying rooted in Scotland has been particularly advantageous. The preservation of local identity and institutions has been influential as has been the ability to recognise and capitalise on new opportunities, for example related to the development of North Sea Oil or even the knock-on effects of US pensions regulations when local companies were quick to identify and seize particular opportunities based on, respectively, new UK and US government policies.

The financial services industry has been consistently strong in Edinburgh since the end of the seventeenth century, solidly embedded in banking but with innovative incremental growth in insurance, investment trusts and asset management, all areas where the city remains strong despite market turbulence. The presence of the industry in Glasgow has been rather more chequered however, with the city's economic development centring much more on trade and manufacturing. Some institutions have weathered the storms, most notably Clydesdale Bank which has been in the city since 1838, but the renaissance in financial services in Glasgow today is much more about relatively large scale operational centres for multinational firms like Morgan Stanley, Barclays, J.P. Morgan, AXA and Chubb. There is some rivalry between financial institutions in the cities but rather a greater complementarity with many businesses, for example Tesco Bank, BNP Paribas and HSBC, seeking to have operations in both cities drawing on the particular advantages of each.

As interviewees outlined when commenting on the future for financial services, there are concerns on the horizon including the increased digitisation and automation in the industry (often gathered under the label of fintech), the loss of headquarters offices, ever greater concentration in bigger organisational blocks largely outside Scotland and the rise of other financial centres offering greater critical mass and better market access. What we see today, however, are strong and successful financial services clusters in both Edinburgh and Glasgow built on a mixture of factors from the past and the present and from the economic and geographic environment coupled with individual firm strategies and decisions. This chapter has given a brief overview of the development of these financial services clusters in Edinburgh and Glasgow based on a wide range of material from publications and the internet and from the contributions of interviewees. This has served to highlight several factors germane to the main subject of this research, the analysis of today's place-firm relationships in these sectors in the city.

5 Findings, Analysis and Discussion

As noted in Chapter 3, the review of the literature has revealed a wide variety of considerations from different disciplines in relation to the PFR which have been integrated into a new and comprehensive framework for analysis. The findings from this exercise, the results from this integration, are detailed in section 5.1 following. Adding evidence from the interview process this framework has been extended into a new model for the PFR, as explained in section 5.2 following, and this model has been applied in the empirical study of financial services businesses in Edinburgh and Glasgow. Close analysis of the qualitative data with the aid of key factor mapping has revealed a number of insights about the PFRs for these businesses and the most significant are described in sections 5.3 to 5.6. These will be shared with the research participants through customised briefing papers and presentations.

5.1 Constructing the Framework for Analysis

5.1.1 Overview and coding structure

This framework is central to the research. The following sections, therefore, give a detailed breakdown of what is covered under each theme and how this was derived from integrating strands from existing literature and theory with responses from interviewees. The literature references throughout this section are far from exhaustive and are intended merely to indicate a connection with a relevant area of theory.

5.1.2 Ease of doing business

The theme of ease of doing business captures direct, tangible, day-to-day factors affecting how the location of a firm adds to or detracts from how easy it is for it to do business. These are mostly easily verifiable basics including the available transportation system, the strength of support services and the access to market. This theme also includes consideration of the political and regulatory environment in the context of how this might directly affect a firm's ability to do business. These are some of the factors likely to be considered in a PESTEL type environmental analysis and in the first stages of screening pros and cons around an FDI decision and there are, therefore, links to strategic management literature in these areas.

The political environment and the role of government are topical concerns but have featured as key considerations from as far back as Adam Smith (1776) and more recently in both cluster theory by Porter (1998) and in relation to human capital theory (Glaeser, 2011). Most writers advocate a limited role for government to just provide the enabling environment for business to flourish. Much of the literature in economic geography, however, elaborates on

recommendations for government action and intervention to support economic and cluster development. The economist Mazzucato (2014) takes an interestingly different approach in showing how significant, under-appreciated and under-rewarded government activity is in supporting business, not so much from direct assistance and intervention but through spin-offs from research and spending in key areas like defence. This is obviously a significant area where interviewees' responses have been coded not just to the level-2 node *political environment* but also to two level-3 nodes, *policy and regulation* and *incentives and support*. Political factors tend to receive the greatest share of media attention and debate which perhaps distorts their importance. They are certainly significant, perhaps never more so than at present, but one of the aims of building this comprehensive overview is to set out all factors in context and ensure they are given appropriate levels of consideration. New tariff barriers, for example, can irredeemably change business prospects but a move to avoid tariffs could jeopardise access to talent or quality of life with equally deleterious effects.

The consideration of infrastructure and proximity to market hark back to location theory in economic geography (Weber, 1929) and the strictly physical positioning of business. At one stage, these were central considerations in economic geography, but significance and interest have waned partly due to technological development and globalisation. This notwithstanding, feedback has been recorded under three level-3 nodes to the main physical, infrastructural needs mentioned by respondents, *transport*, *connectivity* and *offices and office services*.

The availability of essential support services is largely seen as a housekeeping issue rather than a differentiator, though Sassen (2012) notes how the growing inequality in global cities between the rich professionals and the poor service providers is beginning to bring fundamental changes to places and the PFR. The last category under this theme, *market access*, was once considered central to location decisions (Harris, 1954) but is less so now with the effects of globalisation, improved transport and communication and the growth of the trade in services as opposed to commodities. Table 5-1 following gives a breakdown of the 4 level-2 factors aggregated under this theme.

Table 5-1 Ease of doing business factors

Political environment

Topic	Reference	Description
PESTEL. Superior performance starts with understanding the business environment.	Lynch, 2006 Johnson, et al., 2008 Kaplan & Norton, 2008 Clegg, et al., 2011	This covers the significance of government intervention to firms, whether it is at city, regional (Scotland), national (UK) or supra-national (European) level. All levels affect every business. This, in turn has been split into two nodes, namely the higher-level thinking and planning as collected under <i>policy and regulation</i> and then the direct government intervention and activity as collected under <i>incentives and support</i> .
Government role to create enabling environment.	Smith, 1776 Porter, 1998	
Avoid over-regulation. Just need a level playing field to build human capital covering the basics like health, safety and education.	Glaeser, 2011	
Recognising the government contribution to business development through direct investment in R&D etc.	Mazzucato, 2014	
Linking government policy to corporate strategy for competitive advantage.	Lazzarini, 2015	
Regulatory protection for IP in foreign market entry.	Coeurderoy & Murray, 2008	
Government incentives; OLI.	Dunning, 1998	
Institutions in the "third Italy".	Bianchini, 1991	

Infrastructure

Topic	Reference	Description
Location theory.	Weber, 1929	This category captures references relating to some of the hard realities

Opportunities in the internet age; innovation and agglomeration.	Leamer & Storper, 2001	of the city locations; the physical access into, around and out of the cities, the virtual access in terms of telecommunications and the internet and the availability of adequate work premises. A further sub-division has been made to 3 level-3 nodes, namely <i>transport</i> , <i>connectivity</i> and <i>offices and office services</i> . Literature and theory have rather moved on from analysing these factors in any depth but they were of at least passing interest to interviewees.
Significance of city transport.	Glaeser, 2011	
MNE overseas location choice.	Schotter & Beamish, 2013	

Support services

Topic	Reference	Description
Porter's diamond and the interaction with related and supporting industries.	Porter 1998	This classification includes references to the availability of the typical and possibly essential support services financial businesses need on a regular basis, for example accountants, lawyers, IT professionals, marketers, recruitment agents, cleaners, caterers and others. This relates to any basic availability or lack of availability of necessary services that present a particular advantage or deficiency in relation to the place.
Specialised support networks in global cities and the service underclass.	Sassen, 2012	
Minimising the liability of foreignness in FDI.	Goerzen, et al., 2013	

Market access

Topic	Reference	Description
Location theory.	Weber, 1929 Harris, 1954	This section contains references to whether firms have been attracted to their location because of their proximity to the markets they serve or at least to good connections to these markets.
Strategic choices and the competitive environment.	Ansoff, 1965	
OLI.	Dunning, 1998	
Market oriented value disciplines.	Treacy & Wiersema, 1993	

Market/customer analysis.	Lynch, 2006
---------------------------	-------------

(Source: developed by the author)

5.1.3 Talent

This theme covers all the references to the skills, availability, costs, culture and other aspects of the work-force as perceived by those representing the businesses questioned. This embraces the basics of skills availability and costs dating back at least to location theory (Weber, 1929) and also, albeit slightly more indirectly, to theories about specialisation and division of labour (Smith, 1776) and productivity (Taylor, 1911; Mayo, 1933) even though strong links to location may not have been made by these writers at the time. It also includes more recent interest in the knowledge economy and the perceived centrality of talent to economic success and the growth of cities (Glaeser, 2011; Florida, 2002, 2012; Sassen, 2012).

There is surprisingly little interest in the direct cost of labour nowadays by either theoreticians or practitioners. This was once a dominant concern of early studies in, for example, production efficiency, even though scant attention was paid to place effects, but it is now largely confined to the basic analysis of how to internationalise and even then, there is greater focus on harnessing intellectual capital and optimising global production networks.

There are significant contributions about the importance of talent pools, the role of education in ensuring talent availability, the importance of the free movement of labour to encourage knowledge transfer and, above all, the paramount importance of the quality of talent and appropriate skills for business success. In strategic management, this latter consideration was manifest in the work on resource-based value and core competences and in economic geography in the work on clusters, the knowledge economy and knowledge-based city growth. Many of the interviewees talked about talent and skills as almost interchangeable terms. Two different views are represented however. On the one hand there is talent in terms of having workers immediately available with the right skills to do the jobs. On the other there is talent in terms of having workers immediately available who are able to acquire the necessary skills under instruction from within the firm. These aspects are not differentiated here but could be the subject of further study as there would appear to be a trend towards the latter. As before, Table 5-2 following gives a breakdown of the 6 level-2 factors aggregated under this theme together with a sample of relevant references.

Table 5-2 Talent factors

Cost

Topic	Reference	Description
Labour cost, efficiency and productivity.	Smith, 1776 Taylor, 1911 Mayo, 1933	Cost here is essentially the direct cost of the workforce in terms of salaries, training and other benefits but would also take into account cost efficiency, the direct cost related to productivity.
Location theory.	Weber, 1929	
The shift in priorities from cheap labour to intellectual capital in MNE FDI.	Dunning, 1998	
FDI and global production networks.	Dicken, 2011	

Critical mass and talent pool

Topic	Reference	Description
MNE FDI increasingly tied to requirements of knowledge intensive economy.	Dunning, 1998	The references here relate to the strong awareness of the need for, and existence of, a wide and diverse talent pool. They recognise that the advantages of this work in two, mutually supportive ways. It is essential for companies to have ready access to skills in a talent pool of sufficient depth to give the flexibility to meet changing requirements in both skill types and quantity. It is also essential for employees to have the reassurance that they will be able to move jobs without moving home if necessary and that they will not be reliant on a single employer for career progression.
Cluster defined by talent pool.	Henry & Pinch, 2000	
Knowledge based spatial clustering.	Malmberg & Maskell, 2002	
Developing human capital. Importance of skilled professionals.	Glaeser, 2011	
Importance of specialist talent pool; cities as global control centres.	Sassen, 2012	
Creative capital. Talent chooses places not companies; companies follow talent. Need thick talent pool to attract talent.	Florida, 2012	

Education

Topic	Reference	Description
Links between business management and universities and/or business schools.	Taylor, 1911 Mayo, 1933 Drucker, 1946 Chandler, 1962	This section is a compilation of the references relating to the importance of local education in contributing to the size and quality of the talent pool. To reflect the input from interviews three sub-sections have been used, namely <i>school, FE and other training and universities</i> .
Knowledge based geographical clustering. Importance of knowledge creation.	Malmberg & Maskell, 2002 Maskell, 2001	
Education central to creating human capital.	Glaeser, 2011	
University - government – industry triple helix.	Harrison & Turok, 2017	

Free movement of labour

Topic	Reference	Description
Transfer of knowledge through labour movement.	Henry & Pinch, 2000	Within the broader context of the importance of the free movement of labour to knowledge transfer, diversity and innovation this classification also captures the notable number of references linked to firms' international, or at least multilingual, staff requirements.
Human capital maximised from open nations, free trade and immigration.	Glaeser, 2011	
Tolerance and diversity attract talent.	Florida, 2012	
Professional and service talent pool in global cities.	Sassen, 2012	

Quality

Topic	Reference	Description
Motivation and the working environment.	Mayo, 1933	This category captures views on the quality of the professional talent, especially specialists, leaders and innovators. Although strategic management does not make a connection here to location there is a considerable amount on
Link between core competences and competitive advantage.	Prahalad & Hamel, 1990	

Link between firm's resources and knowledge and competitive advantage (RBV).	Barney, 1991	the importance of talent in the firm as being a source of competitive advantage as there is also in economic geography in relation to the knowledge economy. This is a particularly important area and has been sub-divided into three sections namely <i>motivation and culture, flexibility and adaptability</i> and <i>professional and technical skills</i> .
Knowledge and skills. Adaptability and learning capabilities.	Lubit, 2001 Geus, 1999 Senge, 1992	
(Japanese) Flexibility and adaptability.	Pascale & Athos, 1982 Pascale, 1978	
Human capital at heart of growth.	Glaeser, 2011	
Talent drives location decision.	Florida 2012, 2009	
Complex requirements for control centres.	Sassen, 2012	
The importance of specialist talent.	Storper, 2013	

Staff turnover

Topic	Reference	Description
The importance of labour churn in knowledge transfer.	Henry & Pinch, 2000	This captures mixed ideas about staff turnover. Many traditional firms would regard high turnover as a bad sign whilst others might see it as essential to stimulate innovation and knowledge sharing. The norms here are likely to be affected by local culture together with other factors.

(Source: developed by the author)

5.1.4 Quality of life

Quality of life for employees has not been much of a consideration in strategic management generally except in the context of FDI and expatriate expectations (Schotter & Beamish, 2013). The increasing focus on technology and innovation and the related importance of knowledge creation and knowledge sharing has significantly increased interest in other disciplines however, including in economic geography, focusing on the role quality of life issues play in generating an enabling environment for creativity and knowledge sharing and for attracting talent. Particular attention has been given to the growth and changing character of cities in this context in work by Florida (2012, 2009, 2002), Glaeser (1992) and

others and the idea, closely linked to *Talent* above, that many employees choose place first and company second, that companies have to follow the workers. Storper (2013) and Sassen (2012) address this issue though with rather different conclusions seeing cities still more as workshops than playgrounds, attracting talent by offering jobs.

The behavioural factors in international business decisions about city locations are highlighted by Schotter and Beamish (2013) and the lifestyle connectedness of global cities, that talented workers will make choices about where to work comparing cities around the world as opposed to countries or to rural or provincial alternatives, is noted by Goerzen et al (2013) amongst others. Table 5-3 following gives a breakdown of the 5 level-2 factors aggregated under this theme together with a sample of relevant references.

Table 5-3 Quality of life factors

Affinity

Topic	Reference	Description
Sticky places.	Markusen, 1996	This category captures references to the bond that exists between people and places that attracts them or makes them reluctant to move. This is often irrational, perhaps an emotional connection, but it is strongly apparent in this research and results in a clear constraint on the notion of the mobility of labour and of the freedom to locate or relocate businesses on a purely (economically) rational basis.
Inertia in corporate culture.	Schoenberger, 1997	
Behavioural factors in MNE location choices; the hassle factor.	Schotter & Beamish, 2013	
New entries, start-ups, spin-offs, clustering and spatial inertia.	Frenken, et al., 2015	
Behavioural factors in locational stickiness.	Thaler, 2015	

Cost of living

Topic	Reference	Description
No mention	None	In terms of quality of life, the balance between costs and amenities is clearly better in some places than others. Whilst this is obviously a consideration when considering FDI, and expatriate costs in particular, it does not feature as a significant factor in the literature reviewed but it was a consideration in some interviews.

City character and culture

Topic	Reference	Description
The distinctive culture of Silicon Valley.	Saxenian, 1994	This section captures references to the idea that some companies have to follow talent and that talented workers often choose to live and work in places that appeal because of their character and culture.
The cultural effects on business of Mormonism in Utah.	James, 2005	
Lifestyle, recreation, authenticity, self-actualisation; technology, talent and tolerance = requisites of creative class.	Florida, 2012, 2009, 2002	

City size, accessibility and facilities

Topic	Reference	Description
Human capital and cities as centres of consumption. Cities as lifestyle choice.	Glaeser, 2011	This section records references to some of the more tangible and practical advantages of the locations in relation to quality of life (as opposed to business efficiency), including the ease with which you can get in and out of the cities. The facilities or amenities cities offer have been considered in some quarters as key to attracting the talent required to drive economic growth.
Cities and enabling infrastructure.	Florida 2012	
Anti amenity theory.	Storper, 2013	
Global interconnectedness, cosmopolitanism and advanced producer services.	Goerzen, et al., 2013	
The hassle factor.	Schotter & Beamish, 2013	

Families and recreation

Topic	Reference	Description
Recreational activities important for creatives. Post materialist values. Experiential life.	Florida, 2012	Most of the organisations interviewed recognised that it was not enough to just consider the workforce and the work environment in the place-firm relationship but also employees' families and what employees and their families want outside the workplace. There is little mention of this in the literature.

(Source: developed by the author)

5.1.5 Local networks

In terms of the interaction of successful firms and successful places there has been a steadily increasing interest in the importance of formal and informal networks. This is probably one of the most examined areas in both strategic management and economic geography. This is evident in cluster theory development dating back, for example, to Piore & Sabel (1984) through to Saxenian (1994) and Henry & Pinch (2000) as well as in knowledge based city growth (Storper, 2013; Sassen, 2012; Florida, 2012; Glaeser, 2011;).

Most of this work has centred on knowledge exchange through formal and informal co-operation but the importance of clusters and proximity to encourage knowledge exchange through monitoring and learning in a spirit of rivalry is also recognised. This conceivably dates to Marshall's Industrial Districts (Marshall, 1st ed. 1890) and is seen in Porter's seminal work on national competitive advantage (Porter, 1998). The importance of rivalry for driving high performance is also central to the strategic management preoccupation with competition and competitive advantage seen in the work of writers like Porter (1985, 1980, 1979) and Henderson (1989).

Several of the interviewees emphasised the role of business support organisations in this context though this was little mentioned in theory. Some interviewees also noted that the company's various contributions to the community in which it was located were important to the PFR but this is also largely overlooked in theory. This section captures references to local networks in four areas noted in Table 5-4 following.

Table 5-4 Local network factors

Business support organisations

Topic	Reference	Description
Collaboration between public, academic and business interests. (EU Smart Specialisation).	Takala, et al., 2014	This section covers references to the role played by business support organisations, both private and public, in facilitating networking.

Co-operation and knowledge exchange

Topic	Reference	Description
Flexible specialisation.	Piore & Sabel, 1984	This category captures the more informal interaction amongst firms arising from day to day business including ideas about knowledge spill-overs, untraded interdependencies and knowledge communities.
Cultural networks.	Saxenian, 1994	
Networks, co-operation and competitive advantage.	Dyer & Singh, 1998	
Networks key to success; co-operative and reciprocal.	Cooke & Morgan 1998	
Knowledge communities.	Henry & Pinch, 2000	
Knowledge and skills networks as sources of sustainable competitive advantage.	Lubit, 2001	
Localisation and tacit knowledge.	Kitson, et al., 2004	
Local and global transfer of both tacit and codified knowledge.	Bathelt, et al., 2004	
Role of collective cultural understanding.	James, 2005	
Analysing the co-operative environment, Lynch's 4 links.	Lynch, 2006	
International knowledge integration by MNEs.	Cantwell, 2009	

Co-operation and competition.	Ottati, 1994 You & Wilkinson, 1994 Saxenian, 1996 Newlands, 2003
Knowledge spill-overs. Cities as centres for collaboration and spread of ideas.	Glaeser, et al., 1992 Glaeser, 2011
Complexity requires social and professional connectivity.	Sassen, 2012
Knowledge spill-overs. Cities as enabling infrastructures. Social networks important for talent.	Florida, 2012
Untraded interdependencies. The importance of local interactions and the role of informal institutions.	Storper 2013, 1997, 1995

Local impact

Topic	Reference	Description
What places gain from global production networks.	Dicken, 2011	This category covers firms' relationships with place centred on what the businesses bring to the communities rather than the other way about. This includes employment, taxes, generating work for other local businesses, wages spent in the area, general consumption, charitable work, sponsorship and support for the arts and culture; overall the significant qualitative and quantitative multiplier effects of successful business activity. This is obviously important to the city regions but it is also a very important aspect of the relationship from the firm's point of view. Giving back to the community can strengthen bonds, give satisfaction and pride to employees and increase acceptance and welcome but this has not been recognised in past theory.

Rivalry

Topic	Reference	Description
Competitive environment and positioning.	Ansoff, 1965	Most commentators recognise that clusters and proximity produce transfers of knowledge both through active co-operation and more passive seeing and copying. Proximity also sets benchmarks that encourage rivalry amongst firms to outdo each other and the rivalry can be similarly in a co-operative spirit or in a highly competitive, adversarial spirit. It can also be affected by regulatory requirements and social attitudes.
Five forces.	Porter, 1979	
Survival of the fittest.	Henderson, 1989	
Anti-trust and cartel considerations.	Freedman, 2013 Hylton, 2003	
Competition helps knowledge transmission.	Glaeser, 1992	
Porter's diamond.	Porter, 1998	
Firm rivalry more important to success of knowledge-based clusters than networking. Co-located firms monitor and learn.	Maskell, 2001 Malmberg & Maskell, 2002	
Competition for resources in internationalising.	Fernhaber, et al., 2008	

(Source: developed by the author)

5.1.6 Legacy

When a business starts in a place or moves to a place it inherits, to a greater or lesser degree, the history and culture of the place. It receives a legacy, a gift from the past, whether it wants to or not. This will come through its employees, its interaction with the local institutions and community, its customers, its suppliers and other contacts. Businesses generally do not sit in cordoned off isolation.

There is of course a considerable overlap between what might be considered legacy (from the past) and what might be considered current in terms of influential place factors. This is especially true in areas like education and institutions. I have used here classifications and nodes for both contingencies and the division has had to be subjective based on the context of the reference. In some cases, the same quote has been allocated twice, to *Legacy* and *Talent* for example, where there has been allusion to a strength inherited from the past that is also a still growing strength of today. The *Legacy* theme has been broken down into five categories, 5 level-2 nodes, as indicated in the following Table 5-5.

Table 5-5 Legacy factors

Capital

Topic	Reference	Description
The importance of access to capital in industrial location modelling.	Hamilton, 1967	An important aspect of most legacies is the inheritance of capital and this is a particularly significant and most tangible element of the place legacy for any financial centre. Is there ready access to money for investment? This can also affect the next factor, incumbency. It is sometimes difficult to compete with locations with ready access to abundant capital.
History of fund management in Edinburgh; started from local capital.	Fransman, 2007	
Capital mobility	Sassen, 2012	

Critical mass and incumbency

Topic	Reference	Description
Advantages of history dependent centres locked in through cumulative gains from trade.	Krugman, 1990 Martin & Sunley, 1996	The sheer scale of economic activity that has been built up over time in a place, deriving initially from factors lost in history or even accidents, can attract more business both in the same sector and other sectors. This can obviously have various benefits, but it can also lead to lock-in and possible decline with lack of innovation and renewal. New firms often start where the founder lives and where there is already similar or related activity instead of searching for the most economically rational opportunity. Businesses can then be held back by inertia compounded by sunk costs, real and emotional investment, and the prospect of the costs of relocating.
New firms often start at the home area of the founder. Clusters develop through spin-offs and imitation within the local milieu, sustained by inertia. Most localized clusters, sooner or later, run into problems.	Malmberg & Maskell, 2002	
Inertia and inherited industrial structures as important for competitiveness as new collaboration. Mechanisms of cumulative causation.	Turok, 2004	
Entrepreneurs concentrate on familiar sectors. Prefer to locate where they are.	Frenken, et al., 2015	

Overcoming inertia of history to realise relocation benefits from internet age.	Leamer & Storper, 2001
Sunk costs, real and emotional. Investment in business property and personal property and in relations and community. The sunk cost fallacy. Also the actual costs of moving.	Thaler, 2015

Education and experience

Topic	Reference	Description
Development of core competences from collective learning.	Prahalad & Hamel, 1990	The references logged here relate to deep-seated influences from the educational heritage and long-term experience embedded in the places. This often goes hand-in-hand with the factors identified above in relation to building critical mass. This is reflected in strategic management thinking in the core competences built up in a firm; the principle is the same.
Technological development path and untraded interdependencies.	Storper, 1995	
Evolutionary theory, learning from trial and error. Co-evolution. Dynamic capabilities.	Boschma, 2004 Boschma & Frenken 2006	
Development of competences and learning over time in fund management in Edinburgh.	Fransman, 2007	
City specialisms develop from deep economic history and type of knowledge economy.	Sassen 2012	

Institutions and professional services

Topic	Reference	Description
Flexible specialisation.	Piore & Sabel, 1984	Legacy can be ingrained in informal factors, in culture and tradition, but it can also be traced to more identifiable forces like law and religion and its effect can influence path dependent development.
Institutions in the third Italy etc.	Bianchini, 1991 Scott, 1988	
Influence of law, universities and church.	Moss, 2000	
Path dependency of financial institutions generally.	Fransman, 2007	
Importance of inclusive institutions.	Acemoglu & Robinson, 2012	
How cities are shaped.	Storper, 2013	

Reputation and culture

Topic	Reference	Description
Systemic approach to strategy; firms differ, strategies differ, depending on social context.	Whittington, 1993	This category includes references relating to the more intangible effects of legacy that are no less significant than those that can be attributed to institutions.
Aptitude for innovation.	Pascale, 1978 Pascale & Athos, 1982 Stalk, 1988	
Innovation and development in the Europe and North America.	Bianchini, 1991 Scott, 1988	
Local cultural determinants of industrial adaptation.	Saxenian, 1994	
Role of history and culture in competitive advantage.	O'Shaughnessy, 1996	
Corporate inertia arising from embeddedness in broad historical, social and cultural processes.	Schoenberger, 1997	
Strength of product/ company brands.	Moss, 2000	

Record of, and reputation for, global outlook and careful, long term management for funds.

Protestant work ethic meets bohemian hedonism.

(Source: developed by the author)

5.1.7 What is new?

The detailed build-up of the framework for analysis shows how the various strands of literature and theory have been integrated, along with evidence from the interviews, into the overall picture. Putting all the strands together on the same page is a first in itself, as illustrated in Figure 5-1 below.

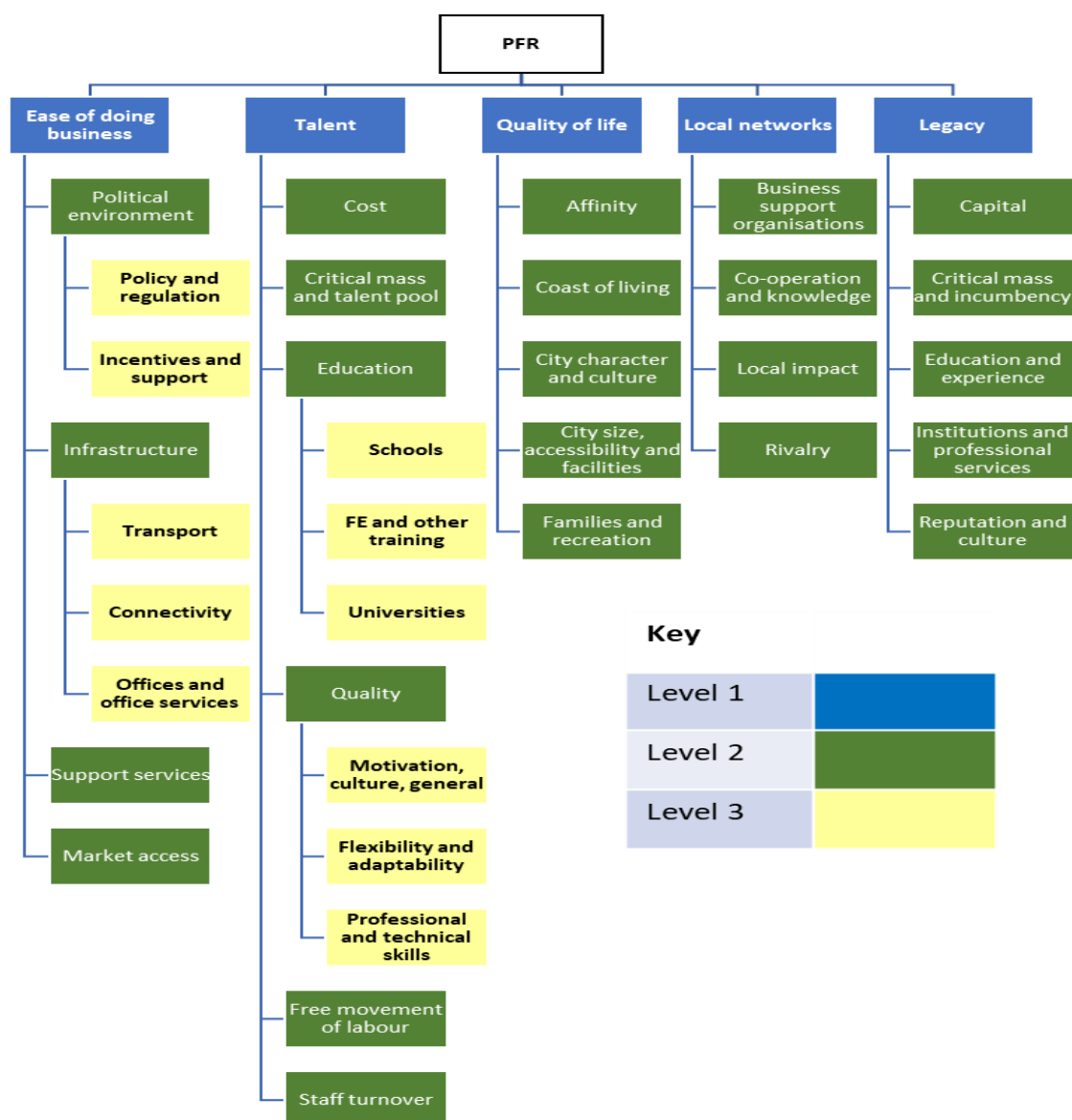


Figure 5-1 PFR factor tree diagram

(Source: developed by the author)

Furthermore, by doing this and relating this input to the interviews, various gaps have appeared where factors have been added to cover aspects that featured in the interviews but were not strongly evident in the literature. These include *affinity*, *cost of living* and *families* under *Quality of Life*. These issues are clearly very important to individuals at all levels in firms but are under-recognised in theory and literature in considering the PFR. In *Local Networks* the importance to firms and to individuals within firms of giving something back to the locality, of contributing to the PFR beyond the business basics of tax and employment, is largely ignored in theory but appeared as a significant factor for some firms in relation to links with other businesses and to the host community. The role of BSOs in promoting local networking also appears to be under-represented in comparing the literature to the interview feedback.

The various elements from the past that contribute to the present in terms of economic success have been recognised but have not been brought together before under the broader concept of *Legacy* as has been done here. This is important because these factors are often significant, often relate to each other and are often ignored, partly because they cannot be recreated and, therefore, offer little guidance for firms and places in terms of future action. The importance of recognising *Legacy* as a significant theme lies as much as anything else in its modifying and dampening influence on the other themes. It does not mean it is impossible to create successful firms, successful places and successful PFRs other than through a history of trial and error and path dependency but it does mean that these factors cannot be ignored and must be allowed for; they underpin the complexity of PFR analysis and pave the road from the past.

Last but not least in relation to what is new about the framework for analysis is the fact that it is more comprehensive than any previous assessment. No doubt it can be added to and modified in future but at this point in time, based on this level of research, it is a fully inclusive, cross disciplinary assemblage that provides a base for further research to build on.

Key finding 1: A diverse selection of academic literature, primarily from strategic management and economic geography, coupled with feedback from semi-structured interviews can be drawn on to produce a comprehensive framework of factors within which the place-firm relationships (PFR) of businesses can be analysed and defined.

5.2 The New Model

As above, I have produced a new framework for analysis of the PFR that draws on existing literature and the empirical research process itself and have developed this into a model that

bridges across these sources to cover significant gaps. This model reflects a broader range of factors influencing the PFR than has been allowed for in any previous work and shows how these factors both interact and combine differently for different locations, types of business and other aggregations. The research has created a tool to enable, for the first time, the comprehensive analysis of the vital relationships between places and firms that contribute so significantly to creating and sustaining competitive advantage for both. It is, furthermore, a tool particularly suited to analysing, also for the first time, the views of managers themselves in the context of firms' competitive advantage(s) in relation to place.

Figure 5-2 illustrates this model as an interactive molecular structure with the firm at the centre linked by strong bonds to the principal themes or "atoms" combining to form a dynamic whole greater than the sum of the parts. These "atoms" interact with each other as well as with the firm in ways yet to be fully analysed and understood.

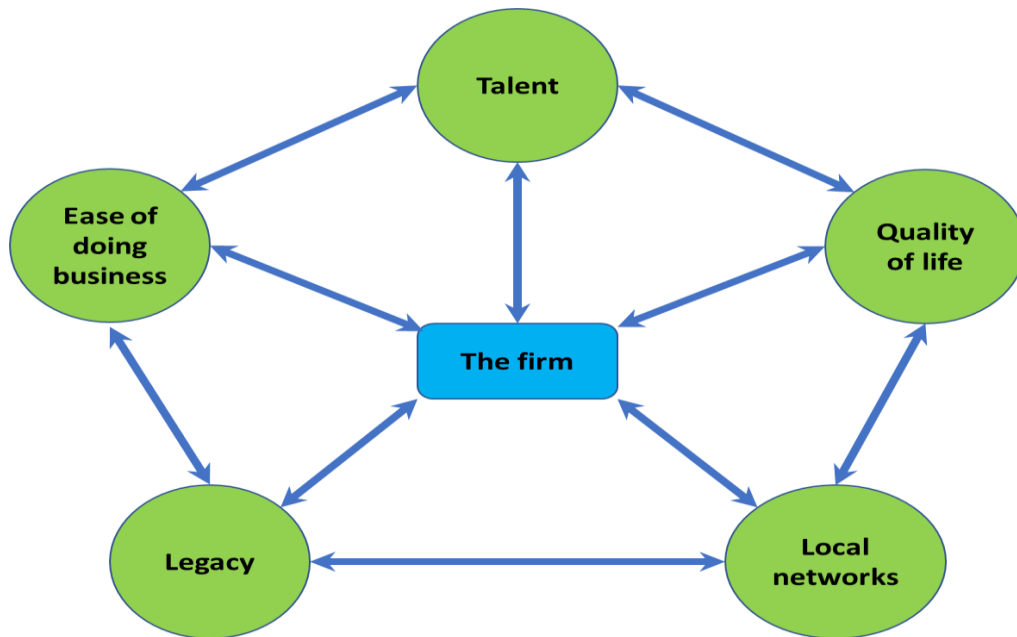


Figure 5-2 The PFR model

(Source: developed by the author)

My analysis of the PFR in the cases of financial services in Edinburgh and Glasgow has looked at one, small cross section of this structure that reveals that the PFR is more complex than has previously been acknowledged but that it is possible to discern priorities and make comparisons. This can open communication on the subject and enable the parties involved to maintain and improve the relationships, something all have an interest in doing.

Figure 5-3 following represents the model in more detail illustrating the potential inter-relationships of the overall system. There are not just relationships between the main themes and the firm but also across the main themes themselves and across all the 24 level-2 and 11 level-3 factors or sub-nodes. For example, is there a link between the importance of *education and experience* under *Legacy* and the importance of *university education* under *Talent*? At a higher level, what are the links between *Quality of Life* and *Talent*? At this stage we only have a few pictures of this complex structure at work from the study of financial services in Edinburgh and Glasgow. The overall chemistry of the PFR leaves much to be investigated and understood.

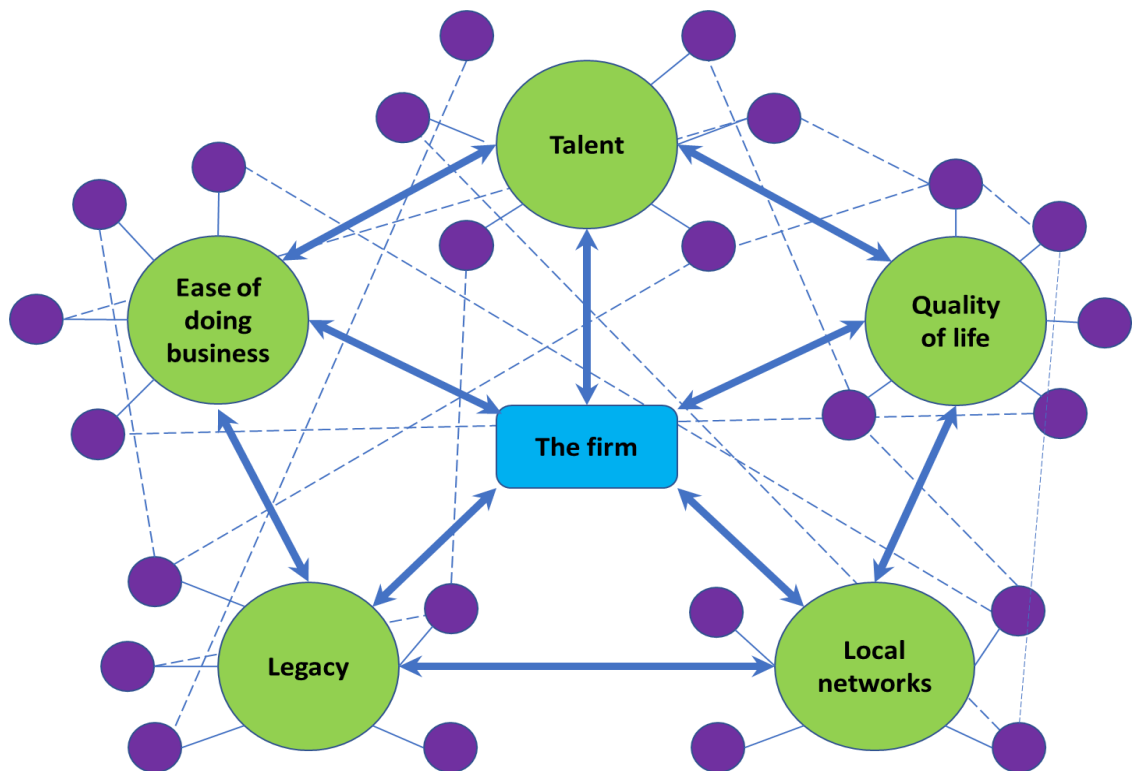


Figure 5-3 The Chemistry of the PFR
(Source: developed by the author)

Figure 5.4 below takes another view of how the model might look in terms of a cluster structure, of the PFR molecules coming together in a compound that is stronger than the sum of its parts. This study has emphasised the complexity of interactions in the PFR. We cannot look to links between places and firms in isolation. There are also links between firms and links from different firms to the same, shared place factors. The workings of this whole system contribute to the benefits, and possible drawbacks, of agglomeration.

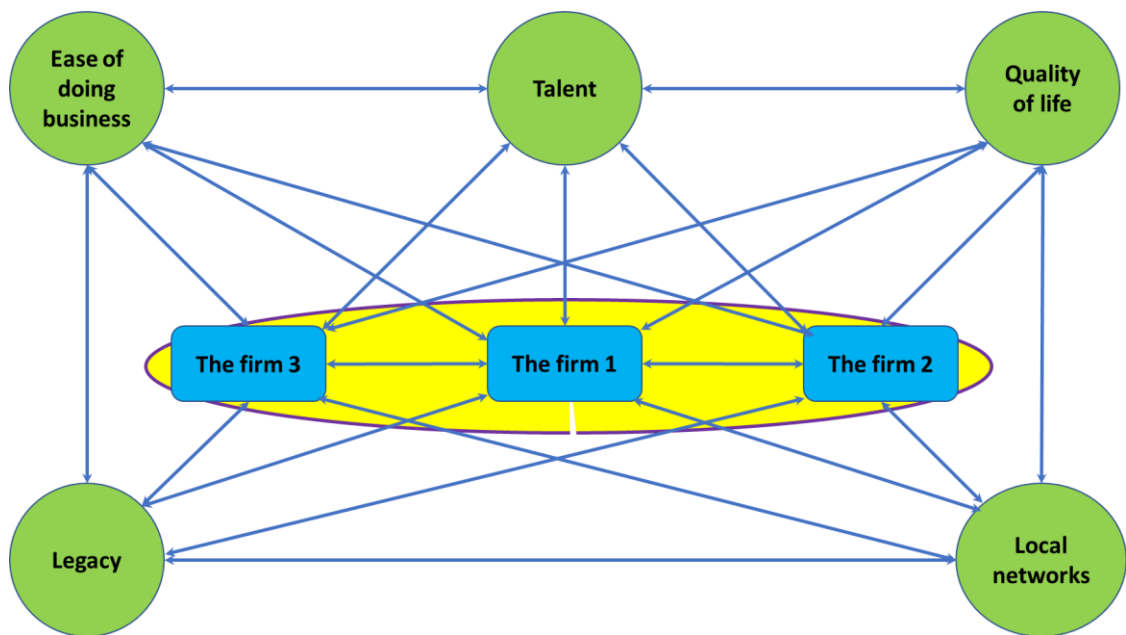


Figure 5-4 The Cluster Model
(Source: developed by the author)

Key finding 2: Through testing the framework directly with businesses, a model has been constructed that can be applied to firms, other organisations and groups of the same to illustrate the main factors governing the various PFRs.

5.3 Balancing Complexity

Turning to the findings from the application of the new model to financial services businesses in Edinburgh and Glasgow, the most notable is that all respondents saw the PFR as significant for their businesses and as impacting on their ability to gain competitive advantage. None subscribed to a view that business success was down to an insular approach based exclusively on adversarial competition and survival of the fittest. All saw the need for constructive interactions with other firms, support organisations, suppliers, government and others through the milieu and physical structure of place.

At the same time, all the responses were different. No two PFR maps were the same. Every firm, and BSO, had its own story. Regional/city forces had different effects on different businesses, although aggregating the feedback did reveal underlying trends as discussed later in this chapter. Furthermore, none of the responses betrayed an impression that the firms were merely passive players in the face of these regional/city forces. All recognised the availability of choice in relation to the place environment and possibilities to change it.

Overall it is clear that firms and BSOs do not adhere absolutely to either the strategic management or the economic geography approaches to explaining competitive advantage

but operate in between, exhibiting elements from both, in ways that can now be captured by the new model here.

All the participants recognise the PFR as comprising a range of distinct but complementary factors. The individual maps show references to every theme in almost every case. This is consistent with the Porter (1998) diamond model in the evidence of the dynamic interaction of different factors and it also echoes Weber's (1929) early location theory work in its triangulation of different forces, though there is no intention here to try and predict location or use triangulation. There are shades of the environmental analysis using the PESTEL tool in strategic management and Dunning's OLI (1980) but with two significant differences from earlier literature. This mapping is both far more comprehensive in representing the forces at work in the PFR than any prior, single work and it directly portrays real views from firms rather than projections and hypotheses. Figure 5-5 below illustrates the complexity of the PFR as described by interviewees. It shows the total aggregated scores at level-1, in the centre, and then the total aggregated scores at level-2 for each main theme. There are also level-3 results which are not shown here.

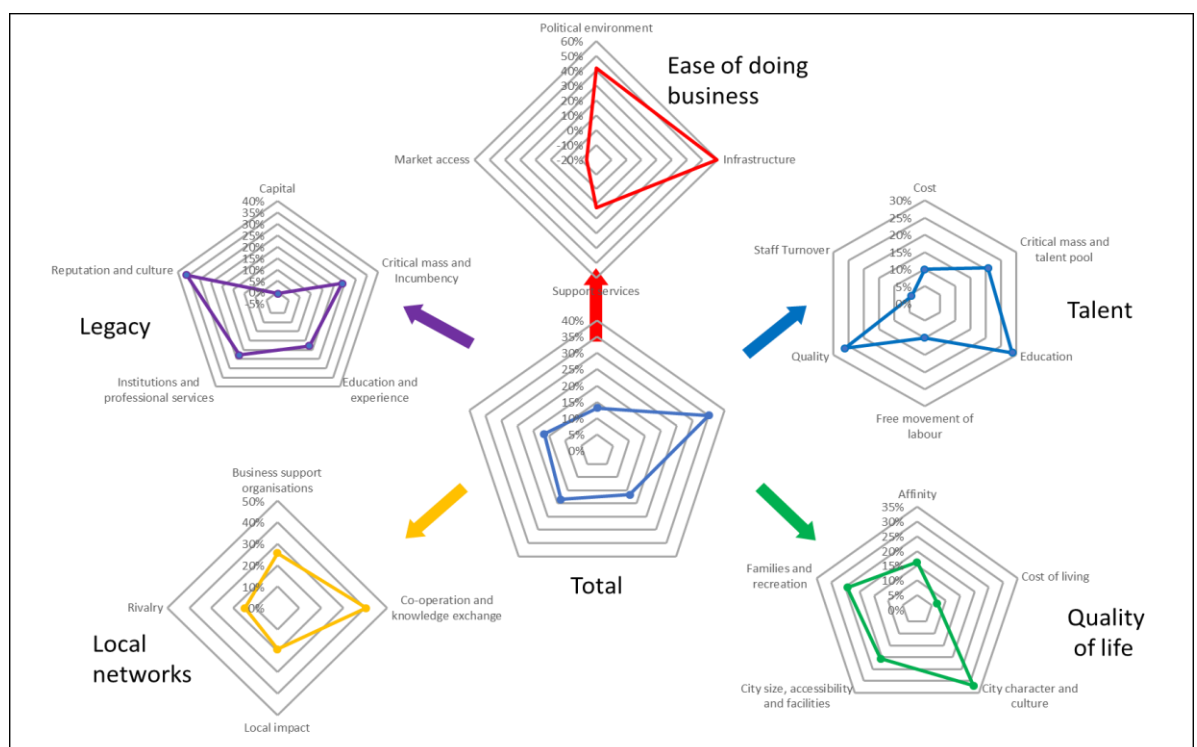


Figure 5-5 All responses PFR, proportions of total scores, level-1 & level-2
(Source: developed by the author)

The participating managers are aware that the PFR is a dynamic and complex field as shown in the mapping of feedback above. Responses were far from uniform and not everyone

contributed in every area. If a topic as suggested by the interviewer was not relevant to the PFR the respondents had no reservations about saying so or of just ignoring it. Those interviewed were all sufficiently senior and experienced not to feel they had to offer more than they thought necessary. Most contributed in detail across the range however.

There were also some direct allusions to the complexity of the subject including this from the Managing Partner of a shared services company (I13)

“I think it's got to be multi-layered. I think you obviously have to be clear what the issues are for your own business and where your client base is, where you're drawing your employment from etcetera, your employees from. So I think it's got to be multi-layered and quite complex.”

Also from a Partner of an investment management house (I15)

“And the way I think about it is there's almost kind of three levels that you need to address. You need to address the global level, the UK national level and the local level.”

And from the Vice President of a shared services operation (I30)

“.. (we look for) the best balance of cost, of accessibility and sustainability of talent, of telecoms, of locations available, of a supportive local government network.”

Talent emerges as the most important factor overall out of this mix, but this is not the sole factor in any single map or aggregation. It only constitutes more than 50% of the total weighted score in three of the 29 views assessed. The PFR is complex and managers realise this. The relationship is multifaceted and continually changing, affected not only by forces internal to the place or the firm but by wider national, international and industry forces. One of the operations involved actually decided on relocation in the course of this study. This was not because of any new deficiency in the PFR locally but because of changes in strategy within the wider company and improved opportunities globally. This all raises two particular points. Firstly, that it is of only limited value to consider the various factors individually; it is the mix that is important. Secondly, that the PFR is a relative measure at a point in time. The place-firm relationship for financial services businesses in, say, Glasgow can remain unchanged, but a firm may consider relocating to or from the city due to changes rolling out elsewhere. The PFR is a dynamic, changing relationship comprising local factors that interface at all levels with wider national and global forces.

It is clear that the managers interviewed all had a feeling for the complexity of the PFR and their role to achieve an optimum balance for their firm in an environment where control was limited. This constitutes a balance between talent availability and cost, a balance between quality of life and the ease of doing business and a balance between maintaining advantages from the past and moving with the times. One of the most striking aspects from the analysis was that each balance is different although common priorities emerged in aggregations. All firms are different, but they also have common interests which they do not always realise.

Awareness of the complexity of the PFR was high but it was not evident that managers engaged in regular, systematic assessments of the extent to which the PFR was aligned with their latest strategic imperatives. Without such assessments there is a danger that changes could be missed, and advantages or disadvantages overlooked. Decisions affecting place, whether relocating or expanding or outsourcing or just redistributing resources, could be made without considering the full implications. For example, a decision to relocate activity to reduce costs may end up being more expensive if the value of local networks and support services has been underestimated.

This complexity of the PFR and the striving for balance are not features recognised so clearly in the literature where there is a tendency to advocate simpler, sometimes single-solution, theories for economic success. In economic geography, where management instrumentality is largely neglected anyway, this might be statistical models (Chorley & Haggett, 1967) or city quality of life factors (Florida, 2012) or local networks (Saxenian, 1996). In strategic management it might be core competences (Prahalad & Hamel, 1990) or a Darwinian struggle for existence (Henderson, 1989) or uncontested spaces (Kim & Mauborgne, 2014). Although *talent* is, on average, the single most important factor in the PFR, every organisation had its own, distinctive map of priorities reflecting the complexity of the subject and management's role in achieving equilibrium.

This is a crucial consideration that has been under-represented in academic literature and theory and in management practice. Managers' awareness of the complexity of the PFR is not, in the main, fully mobilised to contribute to strategic decisions largely because there has not been a framework in which to represent it.

Key finding 3: Firms operate with a pragmatic combination of competition and co-operation in a dynamic and complex place environment which is understood by managers and which managers seek to optimise for strategic gain.

Key finding 4: The availability of a comprehensive framework for analysis facilitates a more systematic assessment of the PFR and better alignment with strategic choices and competitive advantage.

5.4 Talent

5.4.1 The primacy of talent

The above notwithstanding, taking all the organisations consulted together it is clear that one factor in the PFR does stand out from the returns, namely talent. This certainly came across in most of the meetings and interviews where talent was usually mentioned early in the discussion and usually without any specific prompting; in other words, the first responses to the more general introduction and open question of what the organisation gets from the place generally provoked references to talent in some respect. The score for *talent* here, derived from the number of references weighted according to strength of sentiment, amounted to 35% of the sum of all weighted scores with each of the other main themes obviously significant but supporting at levels between 10% and 20% of the total. *Talent* was also the dominant theme in 16 out of the 29 individual organisational views assessed. The CEO of a business support organisation noted presciently (I25)

“I think every conversation that you have with an existing business here in the city, will always start with the choice they made depended on the quality of the skills base.”

5.4.2 Talent and the virtuous circle

This emphasis on *talent* in the PFR is hardly surprising as knowledge and the ability of capable, talented people to use it are central to financial services and today’s knowledge economy. This is consistent with the literature around the knowledge economy and city growth, for example Glaeser’s (2011) emphasis on human capital and, particularly, Florida’s view (2012) that cities have taken over from companies as new centres of social and economic organisation; that companies come to the cities because the talent is there rather than talent coming to the companies. This becomes, of course, a virtuous circle as noted by, for example Sassen (2012), that talent attracts companies which in turn attract more talent which attracts more companies. For example, a service company Partner stated (I16)

“...companies will come where they know there are already others. If there were no financial services businesses here, it would be difficult to attract (them)..”

As can be seen in Figure 3-7 above, however, *quality of life* factors are not rated particularly highly by the firms overall. They do not see lifestyle as a key driver of the PFR so most would diverge from Florida in their views on the significance of this connection. Firms recognise the more prosaic virtuous circle relationship between cities as workshops and cities as sources of talent as seen by Sassen (2012) and Storper (2013). It is the talent pool in itself that attracts both workers and firms; it is about employment prospects, whether getting jobs or filling jobs, rather than softer environmental factors, for example from a fintech company CEO (I8)

“..this self-reinforcing, virtuous cycle, it's a good thing, the more businesses you have, the more interesting it becomes for people to come here as well because they know they can go to another job as well.”

And the need to sustain a critical mass was mentioned more than once; the following from a representative of a business service provider (M8/I12)

“I think the critical mass issue is really important in attracting good businesses and people. I think businesses need to know that they can recruit qualified people in the area. And people need something either to stay for or to come back for or to immigrate, you know, come into the country for.”

This understanding of the workings of the virtuous circle clearly shows that firms see the benefits of co-existence that is at odds with the aggressive competitiveness in strategic management theory. It is at odds with, for example, Porter's ideas (1979) on competitive advantage in encouraging a positive attitude to new entries and start-ups. As a Partner in an investment management firm noted (I15)

“the way we feel about other firms in Edinburgh is that we want them to be very successful and very prosperous because I think we want Edinburgh to be a successful financial centre.”

5.4.3 The talent pipeline

Taking the analysis deeper reveals more about this topic. Figure 5-6 below shows the overall picture for firms compared to BSOs. It is evident that at this level of aggregation there is a remarkable consistency, both between firms and BSOs and between both and the total weighted scores for all interviews shown in Figure 3-7 above.

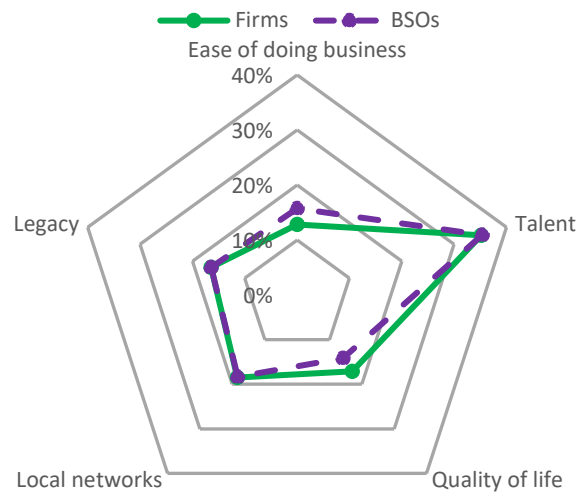


Figure 5-6 Firms and BSOs PFR, proportions of total scores, level-1
(Source: developed by the author)

The response in relation to *talent* can be broken down further to shed more light on the theme. The next Figure, 5-7, shows firms and BSOs compared across the six nodes at level-2. Most important elements underpinning the dominance of this theme are *education* and *quality*, but the priorities are quite different between the two groups.

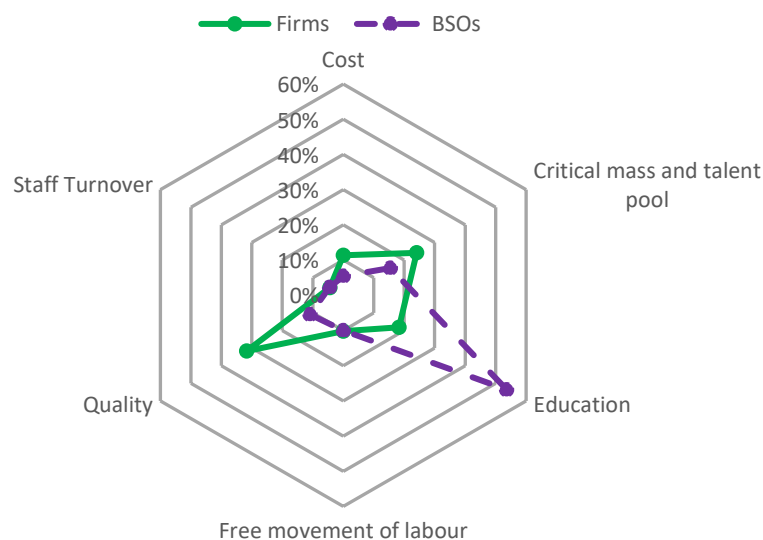


Figure 5-7 Firms and BSOs PFR, proportions of talent scores, level-2
(Source: developed by the author)

Looking down one further level in the analysis, to the level-3 nodes under *education* and *quality*, Tables 5-6 and 5-7 following, it is also evident that it is the university level output

that is particularly appreciated in local education and the professional and technical skills that are most valued under quality.

Table 5-6 Talent, education weighted scores, level-3

Level-3	Weighted score % of total
Universities	65%
Schools	19%
FE and other training	16%

(Source: developed by the author)

Table 5-7 Talent, quality weighted scores, level 3

Level-3	Weighted score % of total
Professional and technical skills	48%
Flexibility and adaptability	28%
Motivation and culture	24%

(Source: developed by the author)

There is a significant divergence in views as to what lies behind the talent advantage in the PFR. Firms take a very immediate view that the right skills are available at competitive rates, they are less interested in looking behind this at how these skills get into the market. As noted by a Partner from a support service provider on the advantages of Edinburgh and Glasgow (I16)

“The principal ones (advantages) are pool of skilled talent at a highly competitive cost compared to other parts of the UK.”

Cost (of talent) as such is not rated very highly. More important to most firms than the bare cost is that Glasgow and Edinburgh offer very good value for the quality of talent available in locations with relatively easy access to London and many other financial centres. The cost/quality/accessibility combination is prized which links back to 5.3 above on the importance of the mix of all factors. Some are more important than others in an ever-changing flow, but none exists in splendid isolation as the only determinant of why businesses choose to be where they are. A senior bank executive stated (I18)

“..it's a relatively skilled workforce at a very attractive cost.”

Similarly, *freedom of movement* is not particularly highly rated, but firms need, and appreciate, the multinational and multilingual talent availability. One insurance company executive commented (I24)

“..there are a lot of native French, German, Italians here, we do some European work so we've got probably 40 of the 350 are born outside of the UK but live here, live in Glasgow and are working here.... We were always surprised at the availability of native French and Germans.”

The need for, and availability of, a multinational workforce was mentioned by several respondents. One firm employed a London recruitment agency to source a specialist, multilingual workforce for their Glasgow office and was surprised to fill all but one of the jobs from people of different nationalities already living in the city. Firms greatly appreciate the availability of the type of talent they are looking for but, perhaps short-sightedly, do not have strong feelings about where this comes from, for example local education or immigration, so long as it is there. As noted from the reference above, they are sometimes surprised at the talent availability.

Overall, the firms do not look deeply at what might lie behind the talent pool; the lifestyle factors attracting people, the inherent reasons for lower costs, the freedom of movement that allows easy access to foreign workers and greater prospects for local employees or the educational system that produces the skills they prize. They appreciate the current mix of talent availability at competitive prices, particularly related to London, and see how the talent pool works to attract both potential employees and other employers.

On the other hand, the BSOs look beyond immediate availability and see the *talent* advantage as mostly coming from education and that local universities are at the heart of this strength. Whilst acknowledging the need for foreign workers the Chief Executive of a BSO noted (I27)

“So ideally can we top up the tanks with the graduates that are coming out of our universities? Which is why we're doing a lot with universities just now keeping that talent pipeline going is really important.”

This was endorsed by another BSO executive noted (I25)

“one of the reasons we've been successful in financial services is that we do not have any balancing of local demand and local supply, we hugely over supply graduates in the financial (sector) with disciplinary relevance to financial services.”

Further emphasis was added on this point by yet another senior BSO manager (I26)

“And in terms of the skills pipeline obviously universities are absolutely critical.”

This divergence could be looked at as firms being short-termist. They are not considering sufficiently what lies behind the talent pool and are therefore neglecting to plan for the future. They appreciate that the talent is available but are less concerned about how this might be supported by, for example, local education, free movement of labour or city quality of life.

The BSOs, by contrast, may be taking a longer-term view, much more concerned with where the talent pool comes from. In the interests of the place, and they are place based organisations, they recognise the need to try and embed a strong pipeline between talent and firms in the cities, ideally through the intermediary of the universities. This is arguably a way to achieve a more mutually beneficial, longer term PFR.

These different positions could well be compatible. Firms might not be short-termist so much as just flexible and fleet of foot. They respond to changes in the mix of factors in the PFR by adapting their resource allocation to the best solution at any time for the business. Firms can move, or reallocate resources, and talented people can move. Firms will adjust to availability in the light of changing needs. There is evidence of this in the growing tendency of firms, especially financial services firms, to seek to reduce costs not by relocating all or even significant parts of their businesses but just by rebalancing resources in different locations. There are signs that the Glasgow and Edinburgh *talent* advantage is valued in this context as London firms seek to just move certain jobs, for example in IT, out of the City. A leading bank executive noted (I14)

“.. we’ve a digital wallet that we’ve developed for our parent and their customers and we started building that in London, but we’ve actually moved out the roles this year up here, because it was a very fast turnover of people in London and cost is significantly higher because of the demand for all those skills. So, we’ve built those roles in a team in Edinburgh.”

This was seen to work similarly to the benefit of Glasgow as noted by an insurance company executive (I24)

“I always think we could be putting some of our (Group) IT work here because we use contractors down in London for a lot of roles in the IT world and it's expensive.....I'd be

starting to look at some testing out, test the waters, see if you can get some development teams up in Scotland.”

So firms energise the day-to-day virtuous circle of the talent pool while BSOs work on its foundations, primarily the education provided by the universities, to build place competitive advantage. This would appear to be a sound and workable arrangement. It is not so evident, however, that there is a common understanding across the three parties as to how this might work. As a BSO executive noted (I27)

“So somewhere there's a disconnect, so we keep on churning out lots and lots of accountants, lots and lots of lawyers and the big accountancy firms and the big law firms are saying 'But we don't have the jobs we would have had in the past' and the reason why we don't have the jobs we had in the past is a lot of law and a lot of accountancy is being computerised with financial technology.”

And a BSO Director noted (I26)

“The challenge often is getting industry to articulate exactly what they'll be looking for..”

At the same time the companies in turn voiced concerns about universities' abilities to meet future demands for mathematics, data science and IT graduates and the lack of connection between universities' performance criteria, for example the Research Excellence Framework (REF), and the needs of industry. An insurance company executive noted (I20)

“I do think maths expertise, IT expertise, the combination of the two if I was a university I would start to think around courses and skill sets and capability in that area because it is going to be something that I think the customer services industry will start to consume in large blocks.”

The universities in turn do not see themselves as central to this set-up. Comments from a university respondent included (M10/I19)

“..maybe the universities are viewed as an industry in their own right rather than as providing the skillset for other industries, at least that's the way that the funding mechanism works..”

“..REFs (Research Excellence Frameworks) are directive as to how things are done and in that respect they're not being directed to provide a pool of labour for the future industries of Scotland.”

It is also clear that funding pressures are encouraging universities to take more foreign students who are unlikely, or may be unable, to join the local talent pool anyway.

“...the imperatives of the University have meant that training is actually being directed towards revenue generation which is greatest from outside the area?”

So firms implicitly rely on BSOs to feed the talent pool and BSOs rely on universities but the BSOs do not really know what the firms want and the universities have different priorities. This is not a question of anyone being at fault. There are various initiatives being pursued to reinforce this source of place based competitive advantage, for example Graduate Apprenticeships, Masters degrees in fintech, the Scottish Financial Risk Academy and others together with finance and accountancy degree courses at all universities and internal development within companies themselves. It does, though, suggest an issue in terms of alignment. Firms are working in constantly changing environments and have difficulty knowing the talent requirements years ahead. BSOs have little to go on therefore in terms of informing the educational agenda. Universities’ priorities are determined by different metrics anyway, partly because employment prospects years ahead are unclear (though there are also strong feelings amongst many in universities that courses should not be too closely linked to job prospects anyway).

5.4.4 Talent as a fragile advantage

It is clear that both Edinburgh and Glasgow offer businesses significant benefits in terms of talent and there is a strong awareness of this amongst firms, BSOs and universities. Despite various initiatives to strengthen and preserve this advantage however, there appears to be an underlying fragility which raises concerns about its sustainability. Firms are becoming more adept at moving activities to where the cost/quality/accessibility mix is best. BSOs have difficulty anticipating, and therefore providing for, future needs. Universities have different objectives from both. Furthermore, talent is highly mobile in itself. London in particular casts a giant shadow over Scotland in terms of attracting talent away. As a support services organisation representative noted (I16)

“For many of your bright young graduates in finance, London is still a huge magnet.”

And a university interviewee commented (M10/I19)

“So there is a big cohort of people who have been coming out as graduates from finance from these three universities in Glasgow but they're not all staying here.”

So further analysis reinforces the centrality of talent in the Edinburgh and Glasgow financial services firms' PFRs but also identifies some reservations in terms of its sustainability.

Key finding 5: Talent is currently the most important contributor to competitive advantage in the PFR.

Key finding 6: Firms recognise the importance of the virtuous circle and mutual benefit where talent attracts jobs which attract more talent.

Key finding 7: Talent is a fragile advantage made more so by the fact that firms, BSOs and universities do not have a common and consistent approach to sustaining it locally.

5.5 Networks, Competition and Collaboration

As can be seen from Figure 3-7 before, the weighted scores for *local networks* comprise 18% of the total, ranking second to *talent* (35%) and just ahead of *legacy* (17%) and *quality of life* (17%). They do not register the singularity of significance that might have been expected from the amount of literature on the importance of networks. In the analysis at level-2 shown in Figure 5-8 below, *co-operation and knowledge exchange* is the most prominent factor from responses just as it is the most frequently cited theme in the literature.

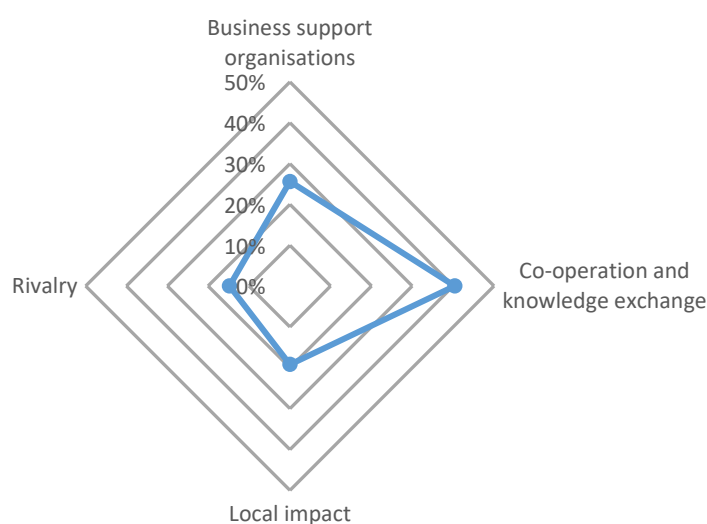


Figure 5-8 Proportions of local networking scores, level-2
(Source: developed by the author)

In constructing the framework for analysis (see Table 5-4) this area attracted most references from the range of literature surveyed, from Piore & Sabel (1984) and Saxenian (1994) through Cooke & Morgan (1998) and Henry & Pinch (2000) to Glaeser (2011), Florida (2012)

and Storper (2013). Most academic commentators see this as central to the workings of the knowledge economy and thereby, implicitly, the achievement of competitive advantage in modern business clusters.

Most interviewees agreed that co-operative networking is an important part of how they operate but not a vital part. It revolves around keeping in touch rather than contact leading to important knowledge transfers, major innovations, significant transactions or new thought leadership. An insurance company Director noted (I20)

“It’s always good to keep an eye on what’s going on in the market and have those networks, but it tends to be more informational and conversational than it does mutual use of resource and capability.”

One of the reasons for this relatively low priority is likely peculiar to financial services, namely a particular sensitivity to issues like insider trading and market collusion. When, in the past, city grandees might have done deals on the golf course or in the clubs this could now be regarded as insider trading or conspiracy to fix the market. Various scandals have engulfed the industry including the London Interbank Offered Rate (LIBOR) manipulation in 2008, Payment Protection Insurance (PPI) mis-selling, foreign exchange (forex) benchmark rigging 2013, interest rate swap mis-selling 2014-16 and others, all on top of the global financial crisis of 2007-8 for which banks and other financial institutions were considered largely to blame. This recent history and the attendant reviews of regulatory regimes around the world have had a sobering effect on the industry even though the roots of trouble have often been in relatively narrow and specialist areas away from the mainstream.

This is affecting outside of work knowledge exchange; joint initiatives and networking have become more circumspect. There was allusion to a club of insiders having existed, but which has now been replaced by open and meritocratic relations revolving more around the BSOs and large social functions than private clubs and more intimate gatherings. One executive noted (I15)

“Apart from anything else the regulatory landscape is very different. I think to be blunt there's a fair amount of borderline insider trading used to go on, so information was shared with your friends. That just doesn't happen now. No one is going to risk going to jail if they have inside information. So, I think people are friends and they chat but it's not more than that.”

Networking therefore centres on transparent lobbying and initiatives in areas like recruitment and training. Most recognise this as good and proper though some noted the detrimental effects on business efficiency. It was no longer possible to just lift the phone and get things done. The networking does give some cohesion to the very diverse financial services clusters but there is no strong leadership, responsibility or executive power for joint implementation; no collective means to manage interventions as indicated above. Business co-operation can be efficient and help to build a robust PFR that is a source of competitive advantage. It can also lead to less desirable outcomes through market manipulation or through the lock-in of too tight networks and the diminishing returns from proximity (Fujita & Krugman, 2004).

Theories take quite absolute positions, for example in relation to the role of co-operative networking on the one hand or the role of cut-throat rivalry on the other, but reality is seldom so clear-cut. The firms interviewed here exhibited neither the struggle for existence competitive drive of, say, Henderson (1989) nor the deep constructive co-operation in networks of social relationships of, say, Saxenian (1996). They work in between in an area that might be theoretically sub-optimal but practically essential. For example, the one area where businesses acknowledged close working together was the relatively safe one of industry training and skills development, a very important realm of common interest where joint efforts suggest success despite the reservations voiced in the previous section, including the financial apprenticeship scheme and the introduction of a fintech degree course at Strathclyde University. An executive in a BSO commented (M4/I1)

“...the big international custody banks - State Street, JP Morgan, City - these kind of companies. Have they come together and collaborated on, for example skills? Yes they do, all the time. That goes on. That definitely is something.”

Although the way networking operates is different across the two cities the end result appears to be the same, namely that it is rather constrained by ethical pressures and limited to lobbying and professional recruitment training initiatives. Despite this apparent reduction in effectiveness, these locations are seen to benefit in relation to the rest of the UK in that devolution and the separate Scottish identity are recognised as catalysts for co-operation, as mentioned by a bank Director (M3)

“All the English (are) jealous of how joined-up things are in Scotland because of devolution. They don't necessarily see Scotland as performing much better economically but they do see

that the focus and governance structure brought by devolution is allowing Scotland to take more than its fair share of everything that's going."

This analysis revealed that local networking is an important lubricant for the financial clusters in Edinburgh and Glasgow but that it operated rather differently in each city and rather differently to the past. The former difference reflects some of the differences in type and age of business and the latter a change in the social and ethical environment. This underlines the way the PFR can change in important ways from place to place and over time but still adapt.

It also raises the bigger issue of the limits to networking. On the one hand, tight, smoothly operating networks can be positive additions to economic development and instrumental in mobilising effective co-operation. Looser, institution led networking is likely to be more superficial and less effective in knowledge exchange and thought-leadership. On the other hand, the very effectiveness and closeness of networks can lead to lock-in and barriers to new thinking and innovation or, even worse, to anti-competitive behaviour and market fixing. The pursuit of more and more effective networking must be tempered by the potential downside effects of lock-in and consumer abusing cartels. One man's co-operation and networking might be another man's market fixing. There is a sense that both cities are searching for the right balance between competition and co-operation as identified and discussed by Newlands (2003), Saxenian (1996), Ottati (1994), You & Wilkinson (1994) and others.

The significance of *local impact* also emerged from the interviews as an important aspect of co-operation and interaction with the wider community which is not mentioned in any of the literature considered. It appears to be seen as conferring a degree of legitimacy, something that has become more significant to financial services businesses in the wake of the financial crash and the various scandals mentioned and it is also linked to a more general approach to good citizenship and corporate social responsibility.

The findings in relation to *local networks* and co-operation are therefore surprising for what they do not really show. They indicate that, contrary to some of the latest thinking on clusters and knowledge sharing, the role of networking is actually on the wane and that firms appreciate the opportunities to socialise and to co-operate in areas like training but are wary of pushing the boundaries in this area. Local engagement is moving towards a wider involvement with the local community rather than deeper engagement within the industry.

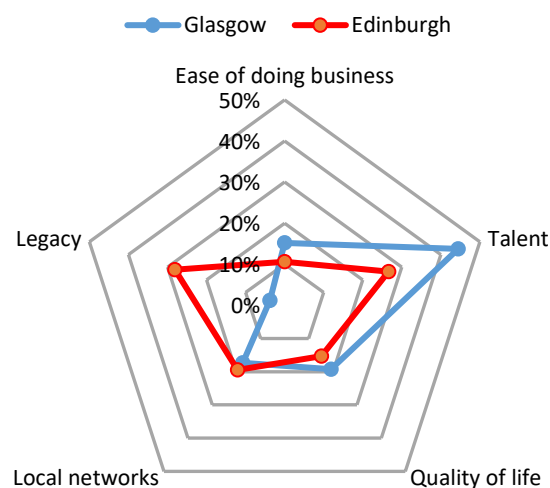
Key finding 8: Most firms operate with a measured mixture of competition and collaboration with limits to the latter dictated by strategic, social and ethical considerations and a shift in emphasis to wider community engagement.

5.6 Edinburgh and Glasgow

One of the most prominent and complicated patterns to emerge from the detailed analysis came from comparing businesses in Edinburgh and Glasgow across the main themes. There are both similarities and differences that suggest two distinct, viable types of financial services cluster.

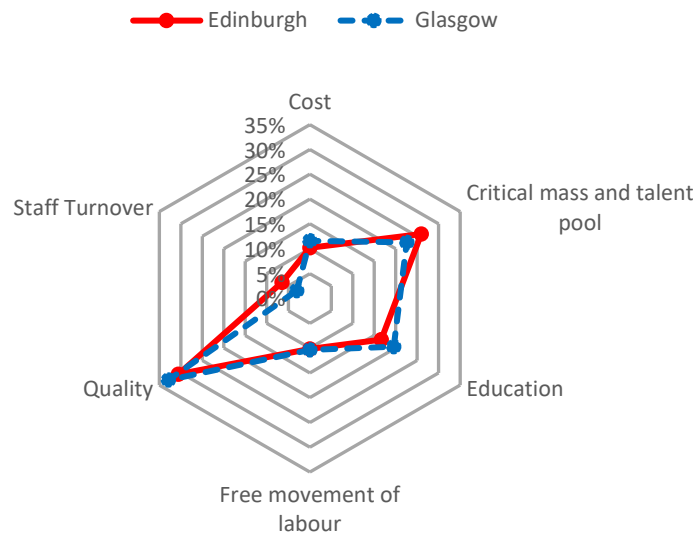
5.6.1 Talent and legacy

Figure 5-9 below shows a marked difference between firms in Edinburgh and firms in Glasgow in relation to the relative importance of *talent* and *legacy*.



*Figure 5-9 Edinburgh and Glasgow firms, proportion of total scores, level-1
(Source: developed by the author)*

For Glasgow, talent is even more pronounced as a proportion of the total weighted scores (44%) than in the overall picture and Edinburgh is correspondingly lighter (27%) with the difference largely in a higher rating for *legacy* (28%) putting this factor on a par with *talent* for the city. *Legacy* in Glasgow accounts for a mere 4% of the total weighted score. The shapes of the Edinburgh and Glasgow profiles for *talent* at level-2 are very much the same for both cities as can be seen in Figure 5-10 below.



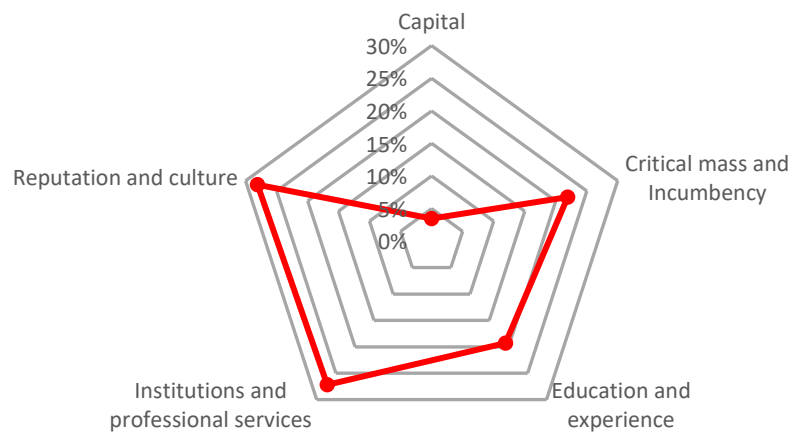
*Figure 5-10 Edinburgh and Glasgow firms, proportions of talent scores, level-2
(Source: developed by the author)*

Relevant considerations in relation to *talent* have been covered above and apply for firms in both cities. A significant point here, though, is to recognise that the identification of two different financial services cluster types in the two cities is as much about similarities as differences. In thinking about Edinburgh and Glasgow there is a tendency in Scotland to dwell on the differences whilst there are many similarities often more obvious to outsiders.

As regards *legacy*, the differences are quite pronounced however. Edinburgh has enjoyed a far longer unbroken history of success in financial services, effectively since 1695, than Glasgow where financial services gave way to engineering and heavy industries as the city's economic stalwarts and have only relatively recently regained prominence. A longer history is likely to mean a greater appreciation of *legacy*. An Edinburgh investment manager remarked (I15)

"I think the main reason that we're a large successful business based in Edinburgh is we started off as a small successful business based in Edinburgh. Our roots are here."

There is more to it than that however. Figure 5-11 following shows the level-2 breakdown for *legacy* in Edinburgh firms.



*Figure 5-11 Edinburgh firms, proportion of legacy scores, level-2
(Source: developed by the author)*

This highlights the fact that the legacy effect derives from the interaction of a number of factors operating in similar proportions. These factors are described below, (excluding *Capital*, where an inheritance of significant amounts of local money looking for investment opportunities is no longer so relevant).

5.6.1.1 Critical mass and incumbency (22%)

Several respondents attributed the success of financial services in Edinburgh to the attainment of a critical mass in the industry and beneficial cluster effects. As one BSO Chief Executive put it (M4/I1)

“I think partly there's a history aspect to it. We could call it history or perhaps we would call it critical mass. It is quite obviously more congenial to a company to be able to operate in a place where skills that they need are reasonably readily available.”

5.6.1.2 Education and experience (19%)

Looking behind the origins of critical mass, some noted the role of education and experience. A financial services support business representative suggested (M8/I12)

“I think there is, there's a critical mass issue..... But I think in terms of generating individuals with a well-educated professional background, but still able to have an entrepreneurial flair, I think that was also critical.”

Another from a banking background noted (I27)

“If you came from a Scottish educational background you were kind of rock solid, very high standard and a lot of companies would choose to recruit Scottish graduates. And in fact it was an English company I originally worked for and they particularly said the quality of Scottish graduates is very, very high. Now I'm pretty certain that would still be the case to this day, that that view would be held.”

And an Edinburgh banker noted (I3)

“You go back to the Church of Scotland's Widows' Fund, an amazing creation of insurance and the actuarial skills in Scotland, again, very much embedded. That to me again is a product of the breadth of the education. You had mathematics and related activities that could have easily been discarded as the more difficult subjects to a lot of people but they were kept absolutely core in the breadth. You did English and you did mathematics.”

5.6.1.3 Institutions and Professional Services (27%)

Fed by education and contributing to building critical mass, and gaining from critical mass, Edinburgh benefitted from the evolution of a unique set of financial institutions and professional services groups as noted by an investment manager in the city (I7)

“How you draw a line from 1707 to the existence of the Faculty of Actuaries, the Institute of Chartered Accountants in Scotland and the Law Society of Scotland, however that's drawn, it is clear that by the middle to the latter half of the 19th Century there were a lot of people up here who knew how to form a company, get its memorandum and articles of association, act as its Secretary and advise it on financial matters, investment matters.”

5.6.1.4 Reputation and culture (28%)

Last but not least has been the power attributed to the growth of Edinburgh's reputation, linked to the city's and the nation's culture and working to support and to gain from the other factors. An Edinburgh investment manager noted (I7)

“we've got an incredible inheritance of being good at looking after other people's money, but now every comparison worldwide can be made.”

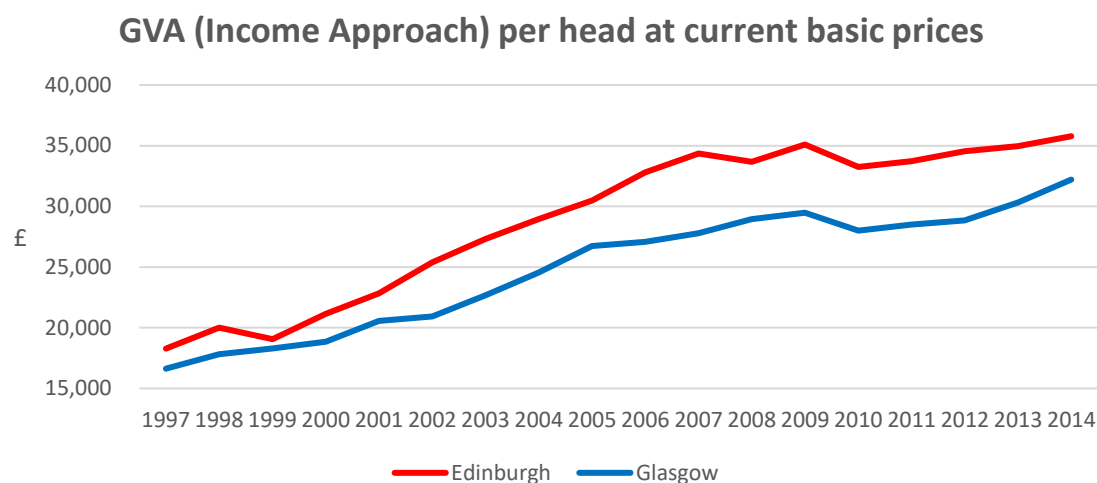
Another senior member of the same community commented (I9)

“that intellectual tradition, which is about analysis, curiosity and a particular mental mind set culture, has been I think very important to (our company), and I think that importance really comes in to do three things. One, there's a sort of moral compass which is about trying to do the right thing, and that's been about high quality of service to customers and clients. I

think the other thing that comes with that intellectual tradition is not just curiosity but a willingness to be independent of thoughts and mind and not always pulled into the group think, the fads and fashions of the day, and (thirdly) actually operating in a different culture, arms-length removed from, let's just call it the financial honey pots, in this case of London...."

So several commentators see quite clearly how their current strengths have derived, at least in part, from this combination of factors. Whilst this is striking amongst some of the city's oldest businesses it is not confined to them. Eight of the thirteen companies interviewed in Edinburgh date their presence in the city from after 1990. You do not have to live through the history to inherit the legacy.

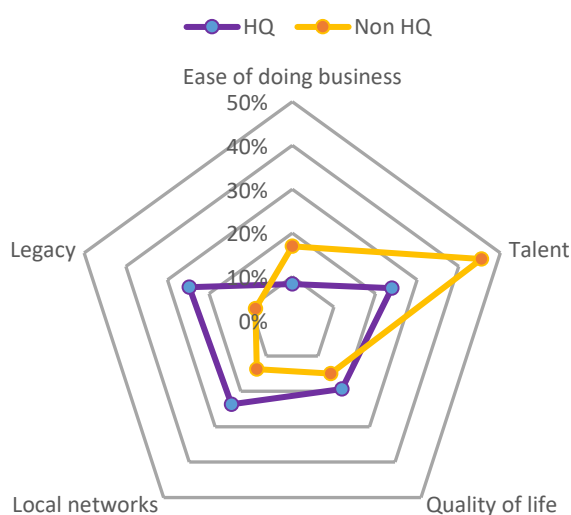
There was very little in the way of attribution of success in Glasgow to legacy issues. It is notable, however, that the cost/quality/accessibility mix relative to the rest of the United Kingdom that is seen to be at the heart of the *talent* advantage mentioned in the previous section has been credited also to being at the heart of Glasgow's former industrial success in shipbuilding and heavy engineering (Devine, 2006). The strength at the heart of Glasgow's current competitive advantage in financial services may well be consistent with the strength at the heart of its past dynamism. There could well be *legacy* elements working more strongly than is recognised in Glasgow, less visible because the industries have changed. This reflects the issue in agglomeration theory as to whether clusters are more effective when built around similar (Glaeser et al. 1992; Porter 1998) or dissimilar (Jacobs, 1969) businesses. In this case it is clear that although the underlying advantage in Glasgow, lower cost skilled labour in relation to the rest of the UK, may have transferred across industries in the city cluster it was a long and difficult transition whereas in Edinburgh, the continuity of strength in financial services has built cumulatively to yield a stronger and steadier competitive advantage as evidenced, for example, in the consistently higher per capita GVA seen in Figure 5-12 below.



*Figure 5-12 Edinburgh and Glasgow per capita GVA, all industries
(Source: developed by the author with data from ONS)*

5.6.2 Headquarters

There is also a marked difference in overall weightings according to whether the firms are Headquarter offices or not, a categorisation that also largely coincides with being home based or incoming. As can be seen in Table 3-1 earlier, 12 of the 22 firms interviewed were headquarters. Figure 5-13 below shows the difference in profiles.



*Figure 5-13 Firms HQ and non HQ proportions of total scores, level-1
(Source: developed by the author)*

Here we see the local, headquarters firms with a PFR much more balanced across the main themes of *talent*, *local networks* and *legacy* whilst the businesses not headquartered in the cities, the incomers, have a very marked emphasis on *talent* above all else. It is interesting

to note that the shapes of the Edinburgh and Glasgow PFRs align quite well with the headquarters and non-headquarters firms respectively. Connections are clearly emerging from more detailed analysis of the data. A bank MD noted (I14)

“So, I would say it’s probably more specialist head office-type functions in Edinburgh and operational specialisms in Glasgow..”

As noted by Strauss-Kahn & Vives (2009), corporate history matters and older, established headquarters operations are less likely to move. The desirability for cities to host headquarters offices is recognised and can be seen today in the auction to host Amazon’s new HQ and in similar moves by US majors like Boeing (from Seattle to Chicago in 2001) and GE (from Fairfield to Boston currently). They bring not only employment and corporate taxes but decision-making centres requiring extensive local support and, usually, a greater stability in the PFR. In this context, the recent trends of mergers, acquisitions and consolidation in banking, investment management and insurance give cause for concern in Edinburgh.

Overall, two typologies are emerging. An Edinburgh model based on legacy appreciating, home based, headquarters firms and a Glasgow model based on talent driven, incoming, branch or satellite offices. These are emerging typologies though rather than clear cut, exclusive divisions. At least two of the companies interviewed in Glasgow fit the “Edinburgh” model and at least two of the Edinburgh companies fit the “Glasgow” model.

It is difficult to generalise about the relative success of the firms studied and, therefore, the relative efficacy of the two typologies. The firms operate to very different metrics in different markets and there are significant differences in scale and international spread. The sample chosen from both cities was based on a mixture of criteria that included quantitative financial measures, continuity of operation and, to a large extent, views from within the industry as to what constituted success.

5.6.3 Business activity

Looking at the firms individually, it is clear that the type of firm is also linked to the *talent/legacy* mix. Of the top eight firms in terms of weighting given to *legacy*, seven (all in Edinburgh) actually have lower weightings for *talent*. Of the bottom eight six (all in Glasgow) show significantly higher weightings for *talent* and the average weighting for *talent* amongst these is much higher than the average for all firms (50% v 35%). Those firms valuing *legacy* most are involved in investment management, support services (accountants) and banking. Those valuing *legacy* least are amongst the fintech, insurance and shared services

companies. The former are mostly, but not exclusively, in Edinburgh and the latter are mostly, but not exclusively, in Glasgow.

5.6.4 Local networks

In terms of the other three main themes, *local networks*, *ease of doing business* and *quality of life* the Glasgow and Edinburgh firms are closer at level-1 as can be seen in Figure 5-9 above. This rather belies differences at the next level of analysis however. Whilst firms in both cities place a similar emphasis on *local networks*, Glasgow businesses show a far greater significance for the role of (largely public sector) BSOs as can be seen below in Figure 5-14.

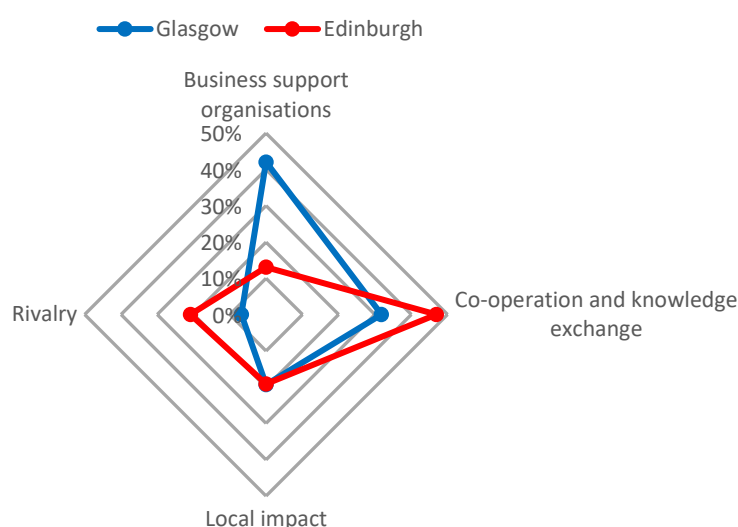


Figure 5-14 Edinburgh and Glasgow proportions of local network scores, level-2
(Source: developed by the author)

Networking in Edinburgh is largely based on private initiative whilst in Glasgow it tends to be more institutionalised, often through meetings, presentations and social events organised by the BSOs. The IFSD in Glasgow is in itself a vehicle for regular exchanges.

An investment fund manager remarked (I5)

“Edinburgh is a large village. Colleagues from different firms meet regularly through children at the same schools; on the golf courses; at dinners and charity events. There’s a lot of connection with peers that you could not get in London for example. Informal. The relatively small, affluent society makes intermingling very easy in Edinburgh.”

From the other side, a shared services manager described the co-operation received on arriving in Glasgow, citing particularly the IFSD and the Glasgow Economic Leadership forum (GEL) (I13)

“We had the Council, the industry, the universities, we had the Law Society as well and everybody was kind of on the same page in terms of agenda and there was this kind of united front of welcome, which actually made the whole thing very straightforward from that perspective.”

5.6.5 Ease of doing business

Similarly, although Edinburgh and Glasgow rate *ease of doing business* closely overall the profiles within this theme are quite different as can be seen in Figure 5-15 below. Whilst the greatest priority in both places is the physical infrastructure, Glasgow firms next emphasise the political environment and government assistance. Edinburgh firms, by contrast, put more store by the private support services, for example accountants and lawyers. Interestingly neither city is seen to offer any benefits in relation to market access. In fact, both record significantly negative scores in this area which suggests the locations are actually disadvantageous in this respect, a vulnerability should connectivity be impaired. A services company executive noted (I17)

“Financial services is not about selling product in Scotland, it's about selling product globally.”

A BSO manager observed (M4/I1)

“nobody comes and sets up an operation in Edinburgh in order to serve the local market.”

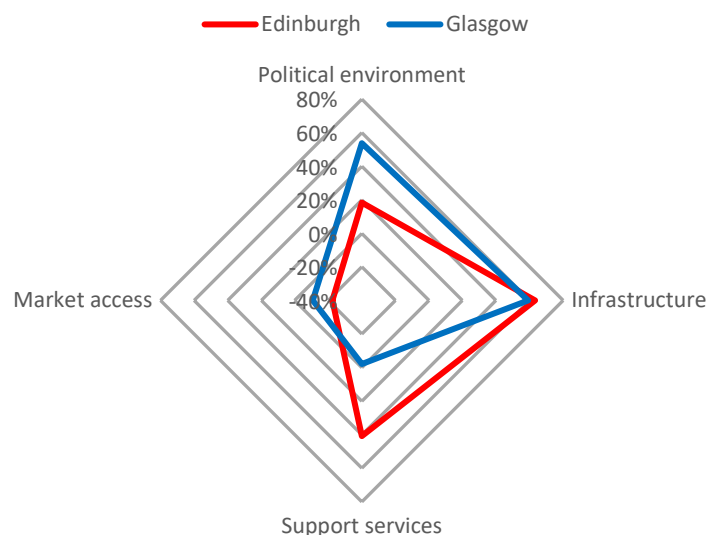


Figure 5-15 Edinburgh and Glasgow proportions of ease of doing business scores, level-2
(Source: developed by the author)

5.6.6 Quality of life

Overall *quality of life* is rated of similar importance in both cities and on a par with *local networks* and here the underlying profile is also quite similar, albeit with a greater emphasis on *affinity* in Edinburgh as is seen in the key factor map, Figure 5-16, below. The shared and almost identical emphases on *city character and culture* and *city size, accessibility and facilities* reflect very strong personal attachments to both cities that came across from every interviewee. The passion was more city specific than country specific and was often related to a superior comparison to the other city; “Glasgow is fantastic, I’m not so sure about Edinburgh” and vice versa. Yet in the context of the PFRs this strong attachment to the place and the quality of life is another example of striking similarities in the two cluster models.

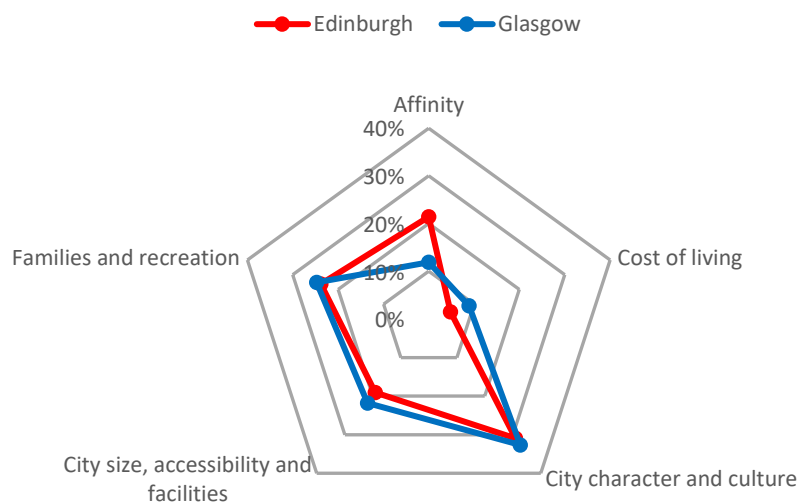


Figure 5-16 Edinburgh and Glasgow proportions of quality of life scores, level-2
(Source: developed by the author)

Most interviewees did not comment on this area without a prompt however, but when they did, they were only too ready to acknowledge how important *quality of life* outside the workplace is and to enumerate the many advantages of Glasgow and Edinburgh in this context. An Edinburgh investment manager noted, (I15)

“..what we emphasise is lifestyle, it's less hectic than London, you'll probably be able to walk to work. That you've got countryside round about, you've got amenities, but you've also got Edinburgh which has got the size and heft to have the cultural life that you might want as an individual, so we've got good music, good theatre, great restaurants etcetera. So that's the way we sell it to our graduates.”

And there were equally effusive comments about Glasgow, for example from an insurance company executive (I24)

“I think it's one of the most friendliest cities in the world, people talk to you, you're just minding your own business and people feel the need to talk to you. It's friendly. I think it's very vibrant.”

5.6.7 Two PFR models

People in Scotland are generally very much aware of the differences between Edinburgh and Glasgow and of the long-standing rivalry between the cities despite their geographical proximity and shared national heritage. In terms of the PFR for financial services businesses, given this backdrop, the similarities across the main themes, indicating perhaps a convergence around more regional factors, are probably more surprising to those involved than the differences. To visitors from out with the country, it may be the other way about. This notwithstanding, what does emerge are two distinct PFR profiles exhibiting both differences and similarities requiring separate policy approaches.

There are banks, investment management companies and support services providers, mostly headquarters operations and mostly in Edinburgh, putting a high emphasis on *legacy*, rating private sector *co-operation and knowledge exchange* well above all else in *local networks*, valuing *support services* just behind *infrastructure* in terms of *ease of doing business* and expressing quite strong *affinity* with the city. There are shared services, insurance and fintech companies, mostly satellite operations, mostly in Glasgow, putting *talent* above *legacy*, valuing the *political environment* just behind *infrastructure* in terms of *ease of doing business*, seeing *business support organisations* as paramount in terms of *local networks* and city attributes above more emotional, personal feelings in terms of *quality of life*.

What emerges is a difference between Edinburgh and Glasgow firms which is not absolute or exclusive but points to different sorts of firms preferring, or perhaps shaping, different PFR environments. Whilst it is difficult to assess exactly what is cause and what is effect, there are indications of two sorts of financial services clusters. One is based more on a financial services legacy, centred on reputation and professional skills built up over time with little direct intervention from government, and another is based on a broader competitive skills foundation, strongly geared to talent availability, with slightly more emphasis on the ease of doing business and, within this, a recognition of the importance of government assistance and intervention. There are two types of successful PFR conducive to different

types of business within the same industry. The two cluster models are summarised in Table 5-8 below.

Table 5-8 Edinburgh and Glasgow cluster models

Edinburgh Cluster Model		Glasgow Cluster Model
Location	Mostly Edinburgh	Mostly Glasgow
Cluster	Same industry, path dependent	Different industries, interventionist
Businesses	Mostly investment management, banking, support services	Mostly shared services, insurance and fintech
Status	Mostly HQs	Mostly satellites
Themes		
Talent	Ranked 2 nd of themes; almost the same as <i>legacy</i> . <u>Priorities within this:</u> 1. Quality, esp. professional and technical skills; 2. Talent pool.	Ranked 1 st of themes; more than double the score of next highest. <u>Priorities within this:</u> 1. Quality, esp. professional and technical skills; 2. Talent pool.
Legacy	Ranked 1 st of themes (marginally ahead of talent). <u>Priorities within this:</u> 1. Reputation and culture 2. Institutions and professional services	Ranked 5 th of themes (with lowest weighted score of any themes anywhere, 4%). <u>Priorities within this:</u> 1. Reputation and culture Other factors barely mentioned.
Local networks	Ranked 3 rd of themes. <u>Priorities within this:</u> 1. Co-operation and knowledge exchange; 2. Rivalry.	Ranked 3 rd of themes. <u>Priorities within this:</u> 1. Business support organisations (> 50% of score); 2. Co-operation and knowledge exchange.
Ease of doing business	Ranked 5 th of themes. <u>Priorities within this:</u> 1. Infrastructure; 2. Support services. Incentives and support = negative score. Market access = negative score.	Ranked 4 th of themes. <u>Priorities within this:</u> 1. Infrastructure; 2. Political environment, especially incentives and support. Market access = negative score.
Quality of Life	Ranked 4 th of themes. <u>Priorities within this:</u> 1. City character and culture; 2. Affinity.	Ranked 2 nd of themes. <u>Priorities within this:</u> 1. City character and culture; 2. City size, accessibility and facilities.

(Source: developed by the author)

The Edinburgh model owes more to history and path dependency and is therefore more difficult to imagine replicating. The role of government, for example, is more consistent with the ideas of Smith (1776), Porter (1998) and Glaeser (2011) where the authorities should be essentially working in the background on basic services and the creation of an enabling environment. In this respect the Glasgow model could be related more to the work of Mazzucato (2014), Storper (2013), Lazzarini (2015) and Sassen (2012) where there is a more active role for government. The difference between the two cities is institutionally embodied in the Glasgow IFSD, mentioned earlier, set up specifically to attract start-up or incoming financial services businesses to a once relatively rundown area near the centre of the city.

The rivalry between the cities of Edinburgh and Glasgow is well known and produced mixed feelings amongst respondents. Some felt that this was constructive in driving each city forward to outdo the other whilst others felt it produced a barrier to staff movement and a block to exploiting the complementarity of the two cities which are, by world standards, very close together geographically. What appears most strongly though is that although there is a rivalry in job creation and development the two cities are actually working to different models with different talent pools. As noted by a BSO executive (I26)

“you would see more of the headquarter functions taking place in Edinburgh because of legacy and history. Much more of the in-house software development and technology would be in Glasgow partly by resource put into skills.”

The Edinburgh model rests more on history and path dependency in line with Boschma (2004) and as Adam Ferguson the Edinburgh Enlightenment thinker might have put it

“Every step and every movement of the multitude, even in what are termed enlightened ages, are made with equal blindness to the future; and nations stumble upon establishments, which are indeed the result of human action, but not the execution of any human design” (Ferguson, 1782, p.64).

Glasgow’s success in financial services on the other hand has stemmed more from intervention evidenced for example in the IFSD and the availability of Regional Selective Assistance (RSA) grants. Both models have their advantages and disadvantages. The differences, and similarities, between the two cities constitute a strong underlying theme throughout. It is possible, though not proven from this research, that the cities achieve the best of both worlds. That they compete in some areas but share benefits and have common

purpose in other areas where the ultimate combination produces the optimum PFR for both places.

The key patterns emerging do not stand alone, they are interwoven in different ways in each model. This is seen clearly in the previous section and in Table 5-8 above identifying the priorities within each group. The cross connections are greater in the Edinburgh model though, where the PFR is spread more evenly across *legacy*, *talent* and *local networks*. This represents a broader and deeper PFR. The Glasgow model firms are clearly there for the *talent* first and foremost, a narrower and potentially less binding connection with place, especially given the consideration above of the fragility of talent. This typology of clusters is rather more nuanced than others to date, for example as identified by Markusen (1996), but needs more research to differentiate the cause and effect elements in the complex factor relationships.

Some participants also saw the headquarters-based companies, largely the Edinburgh model, as contributing to a stronger PFR. As a respondent from a support services company noted

“...with the headquarters comes a lot of specialist services that basically feed off of those headquarters, a lot of specialist functions and services.”

And a BSO executive remarked (M4/I1)

“I think headquartered companies do give a bottom, a weight to a financial centre. It is partly symbolic perhaps and it is partly practical because of the work they throw off in terms of professional services and all sorts of other things.”

Given the complexity of the PFR as emphasised at the beginning of this section it is not realistic to imagine creating clusters from nothing. The Glasgow model suggests though that successful cluster formation can be assisted by, for example, government intervention where this is directed at harnessing forces already at work. It is not possible to create a talent pool, far less a functioning cluster, at the press of a button but it is possible to fashion incentives to limit the loss of talent from local education for example.

Key finding 9: Two distinct models for successful PFRs can be identified for financial services in Edinburgh and Glasgow.

Key finding 10: Cluster formation can be assisted with supportive intervention but the result is likely to be less robust than the longer maturing, path dependent model.

5.7 Key Findings

The overall picture that has emerged is unsurprising in the dynamic interaction of a mix of factors, the emphasis on talent and the differences between Edinburgh and Glasgow and this serves to validate the approach. The more detailed analysis beyond the main themes and the versatility of the presentation have produced, however, some more surprising findings, some of which relate to aspects that might have been expected but were not observed. Tables 5-9 and 5-10 summarise again the key findings both from the creation of the model and from its subsequent application.

Table 5-9 Key findings from creating the framework for analysis and the new model

1	A diverse selection of academic literature, primarily from strategic management and economic geography, coupled with feedback from semi-structured interviews can be drawn on to produce a comprehensive framework of factors within which the place-firm relationships (PFR) of businesses can be analysed and defined.
2	Through testing the framework directly with businesses, a model has been constructed that can be applied to firms, other organisations and groups of the same to illustrate the main factors governing the various PFRs.

Table 5-10 Key findings from applying the new model

3	Firms operate with a pragmatic combination of competition and co-operation in a dynamic and complex place environment which is understood by managers and which managers seek to optimise for strategic gain.
4	The availability of a comprehensive framework for analysis facilitates a more systematic assessment of the PFR and better alignment with strategic choices and competitive advantage.
5	Talent is currently the most important contributor to competitive advantage in the PFR.
6	Firms recognise the importance of the virtuous circle and mutual benefit where talent attracts jobs which attract more talent.
7	Talent is a fragile advantage made more so by the fact that firms, BSOs and universities do not have a common and consistent approach to sustaining it locally.
8	Most firms operate with a measured mixture of competition and collaboration with limits to the latter dictated by strategic, social and ethical considerations and a shift in emphasis to wider community engagement and local impact incorporating both commercial and charitable contributions.
9	Two distinct models for successful PFRs can be identified for financial services in Edinburgh and Glasgow.
10	Cluster formation can be assisted with supportive intervention, but the result is likely to be less robust than the longer maturing, path dependent model.

(Source: developed by the author)

5.8 The Future

As mentioned, one of the aspects of the PFR confirmed by the research here is how it changes over time. With this in mind, interviewees were asked their views on future challenges for their businesses in relation to the PFR. This is a limitless, broad subject so the respondents were prompted to focus on three specific developments, namely Brexit, the possibility of Scottish independence and fintech. The responses were coded in NVivo with a sentiment analysis based on allocating the comments to one of three categories, namely *opportunity*, *neutral* or *threat*.

The last topic attracted by far the most comments and the majority of positive comments. There was relative indifference to Brexit and a general feeling that Scotland would follow London and a solution would be found to limit the damage to financial services, possibly through resource reallocation to EU countries. Scottish independence was seen, at least by the 50% who mentioned this at all, to be a significant threat to business requiring major readjustments and possible relocation. Regulatory and fiscal pressures were envisaged that would require firms to move to England because that is where most of their customers are. A couple of respondents saw potential opportunities if Britain left the EU but an independent Scotland then regained membership.

Most saw fintech as potentially transformative of their business models and of their relationships with place, with a heightened emphasis on talent but weaker ties to specific locations. The combination of financial services and new technology expertise in Scotland and the history of innovation in these areas were seen to bode well for both Edinburgh and Glasgow to be leaders in this revolution. The engagement between financial services and technology was more talked about than evidenced in substance however and could reflect some of the current approaches to local networking. As noted by Spigel (2015; 2016), new technology companies thrive through building their own ecosystems for exchanging information and inspiring innovation. The main financial services businesses are not part of these ecosystems and their current PFR profiles, particularly in relation to local networks, institutions and legacy suggest it may be difficult for them to find a way to engage. Universities could be effective brokers but there is the difficulty, as recognised, of a lack of convergence in objectives.

Overall the respondents are optimistic about the future for their businesses in Edinburgh and Glasgow, barring the significant exception of the one company in the process of leaving, and

of the potential for both sides, places and firms, to evolve accordingly. They recognise the relationships would have to change but, given a long history of adaptation and innovation, are confident this will be possible. They noted, for example, that the significant recent reversals of fortune suffered by the two Scottish financial services giants, BoS and RBS, had damaged the industry in the country but that the rise of new challenger banks, for example Tesco and Sainsbury's, showed the resilience of the sector and the PFR.

6 Conclusions

6.1 Approach

This research is about place, firms and competitive advantage. It is about the interactions between places and businesses that can contribute to the creation of competitive advantage and economic success for both. The approach taken is to find the view from the business, the firm, through a critical realist perspective. Successful firms and successful places clearly co-exist, how can we explain the relationships? The research combines a review of literature, primarily from strategic management and economic geography, with an empirical study involving financial services businesses in Edinburgh and Glasgow to develop and test a new model for these place-firm relationships, PFRs for short.

The work is especially timely in view of current pressures for change in the international economic order. Globalisation is being challenged and there is increased interest in nationalism and protectionism potentially leading to trade wars. This is coupled with the growing momentum of economic growth in the East aligned to new business models. Apparently isolated and separate developments like the Brexit referendum or the Chinese “Belt and Road” initiative are symptomatic of larger trends that affect the geography of doing business and firms must respond to these in an informed and systematic way. This research aims to contribute to such a response.

6.2 Theory and Literature

6.2.1 Strategic management

Place is more than just location. The concept of place used here embraces social, cultural, economic, legal, historical, political, institutional, infrastructural and other factors that attend a geographical location. As such, place has a profound effect on firms. Strategic management literature is, however, surprisingly blind to the influence of place. Tracing the early work on this that grew out of scientific management and studies by Taylor (1911), Mayo (1933), Drucker (1946) and Sloan (1964), through the contributions of Chandler (1962), Ansoff (1965), Porter (1980) and Henderson (1989) and on to Barney (1991), Prahalad & Hamel (1990), Senge (1992), Mintzberg (1994), Kim & Mauborgne (2014) and others it is difficult to find any mention of place as a determinant in company success, as a source of competitive advantage.

There is advice about environmental scanning, for example using the PESTEL check-list, but this reflects place as given rather than as a source of options and choices. It is a relatively shallow, after-the-event exercise. There is also a considerable amount of work on location choice in relation to business expansion. This focuses on overseas MNC operations and, as such, falls primarily into the realm of international business and is a relatively narrow view, for example Goerzen et al (2013), Cantwell (2009) and Fernhaber et al (2008). Furthermore, like environmental scanning, it also deals mostly with the “how” and “where” in strategy and not the “why” and “what”; with implementation rather than formulation.

The reasons for this fall into two broad categories. Firstly, from the early evolution of scientific management and strategic management thinking right through to today, scholars and management writers have largely come from, worked in and considered only one place, the north-east of the United States. This has not only led to a very blinkered view of the role of place but of business and capitalism generally. The American model of doing business was, and largely still is, the template for studying management across the world. It has also shaped the Washington Consensus which has become the template for broader economic development in free market economies. Given the United States’ dominance of industrial production throughout the twentieth century this is perhaps understandable, but it has been short-sighted, particularly as it has remained unwavering in the face of the rise of other countries like Japan, Germany and now China to challenge the American hegemony. Not everywhere is the same as the north-east of the United States and place effects can have widely differing implications for firms.

Secondly, consideration of place effects in strategic management has been significantly constrained by the dominance of an ethos centred on the firm in a battle for survival against competitors. Writers like Ansoff (1965), Porter (1980) and Henderson (1989) defined strategic management in these terms and firms, in the US at least, were pressed by law and society to display an adversarial competitiveness that encouraged a ruthless, insular, protectionist and introverted approach to business. This is at odds with the advantages for businesses that might be associated with place from as far back as Marshall (1st ed. 1890) and his industrial districts, namely clustering together to achieve competitive advantage through capitalising on interdependencies, knowledge spill-overs, constructive competition and co-operation.

This conceptual point of view has been aided and abetted through the takeover of business by professional managers, keen to show their individual contributions as leaders and

strategists. They, in turn, have been supported by the growth of a whole management industry, also centred in the north-east of the United States, dedicated to perpetuating a story of hero managers and competition-beating strategies and propagated through popular business literature, ever more prevalent and sophisticated post-graduate management education and the evangelical MBAs and management consultants this industry produces.

These forces together have effectively eradicated thinking about place in strategic management although the discipline has brought to light many of the questions that might be asked about place in the context of competitive advantage. The search for the scholarly and theoretical approach to the PFR has had to be broadened.

6.2.2 Economic geography

Place is very much the centrepiece of thinking in economic geography and the discipline embraces the notion of the PFR as a two-way phenomenon. Early location theory from Launhardt (1882) and Weber (1929) focused on optimising where to site business operations in terms of factor costs. In line with the growth of positivism and the scientific approach to economic development the early models were refined and extended to show the interaction of a wide range of factors affecting a number of areas, including urban geography and industrial location. These heavily statistical models had two major drawbacks however. Firstly, they could never be comprehensive in their coverage of place factors affecting firms; they could not, for example, account for the significance of institutional, cultural, social, political and historical aspects. Secondly, they only worked at the industry level, with representative companies that were all assumed to respond rationally, simultaneously and similarly to external factors. This stands in stark contrast to the strategic management approach, which revelled in the diversity of companies and championed ways for some to surpass others.

Alongside the quantitative approach, and interacting with it, was a body of work on agglomeration and clusters, including writing by Piore & Sabel (1984), Storper (1995), Markusen (1996), Saxenian (1996), Malmberg & Maskell (2002). This can be traced back to the foundations laid by Alfred Marshall (1st ed. 1890) already mentioned and his identification of industrial districts and the benefits firms were seen to gain from proximity to one another and to markets and sources of labour. This work clearly highlights the importance of PFRs but focuses primarily on the place/regional forces at work largely at the expense of the influence of firm-specific forces. Some studies, including those by Oakey et al (1988), Saxenian (1994), Walther et al (2011) and Hall (2017), have worked on a more balanced view, incorporating bottom-up input from firms, but this approach has been

relatively under-represented in the discipline. Extensions into the particular role of cities today as centres for business clusters and economic growth, particularly through attracting talent into new, innovative high-growth industries, as in Glaeser (2011), Florida (2012, 2009, 2002), Sassen (2012) and Storper (2013), have opened up new thinking on the PFR but have not picked up the challenge to get inside the view of the firm.

There are three possible reasons for this relative downplaying of the role of individual firms in economic geography. Firstly, as is implied with the approach in strategic management, place is just not considered important in relation to firms' strategies. This would be a surprising conclusion in economic geography, however, considering the focus that has been directed to agglomeration and cluster theory. Secondly, there is the influence of the audience being addressed. Most of the relevant economic geography literature is clearly directed at government policy makers and economic development agencies, besides academics, and not business managers. It caters for parties with vested interests in place-based issues and solutions. Lastly, it may be just too complex a subject. As noted, there is a tendency to look for clear, dominant and easily understood reasons behind observable phenomena but in the case of the PFR, or even the theory behind agglomeration and clusters, this is perhaps more complicated and nuanced than expected or desired. Whatever the reasons, although several writers have incorporated feedback from firms in their work, economic geography as a whole tends not to have embraced the individual firm as a discrete and equal partner in the PFR.

6.2.3 Reconciling disciplines

Whilst economic geography and strategic management share the same roots in classical economics and whilst both disciplines have been strongly influenced by a positivist, scientific approach, they differ significantly in their ideas about firms and, especially, about how firms achieve competitive advantage and, by extension, how places share the benefits of economic success. In strategic management, the firm is all, management agency is the primary driver of success and this success comes at the expense of the competition. In economic geography, firms are relatively undifferentiated, and they gain competitive advantage not by battling all those around them, including suppliers and customers as well as rivals, but by competing constructively, observing and copying and co-operating. Place is all, and firms respond to regional forces that play a key role in determining their success.

In this context, the work by Porter on the *Competitive Advantage of Nations* (1998) suggested the disciplines might converge through cluster theory. From a background as a leading theorist of how companies might achieve competitive advantage, Porter turned his

attention to how nations might achieve the same end. Rather than bring the two schools of thought together, however, Porter managed to articulate more clearly the divergence as is illustrated in this thesis. This notwithstanding, the popularity of his contribution and the responses, both positive and negative, that it produced have served to raise the level of interest in place-firm relationships significantly and have given several important pointers for further study. In particular, it is not so much the incompleteness of theories in strategic management and economic geography that we should dwell on but rather that it would be misguided to consider them as mutually exclusive. There are signs, borne out by this work, that there is a degree of tension for firms in most PFRs between the pure, isolationist corporate strategy of theory and a real-world corporate strategy that can brook compromise and co-operation. From the vantage point of the firm, there is a suggestion that practice occupies a middle ground between the two disciplines, drawing on theory from each.

The literature review has, therefore, been crucial in two main areas. Firstly, it has set out what scholars have identified as the main drivers of competitive advantage, for firms and for places, and has, therefore, set the basis for building a new, comprehensive framework within which the subject can be analysed. Secondly, it has shown the gaps in the literature and the need to reconcile two approaches to achieving competitive advantage, one based on firms and adversarial competition and the other based on places and co-operation and sharing.

6.3 Methodology

6.3.1 Mixed methods

I have used a review of quantitative data to identify successful places with successful business sectors within which to position my empirical study. I then employed a mixture of quantitative and qualitative information to identify suitable firms within these places and sectors and then a qualitative approach to investigate the relationship between firms and places, the largest part of the research. This involved semi-structured interviews and meetings with senior figures in the sector, a panel of knowledgeable informants (Weiss, 1995). I have approached the study from a critical realist viewpoint; there is definitely something going on between successful firms and successful places but what this is, is unclear, and must be built up from further enquiry. There are no satisfactory, existing models, quantitative or qualitative or not, to test.

6.3.2 Constructing the framework for analysis

I used qualitative data analysis software, NVivo Pro version 11, to code the transcriptions and notes from my interviews and meetings. The coding structure was built on the new

framework for analysis which, in turn, was derived from various lines of enquiry generated from the literature review plus new factors that emerged from the interview process. This evolved into a model the PFR centring on five principal themes, *ease of doing business*, *talent*, *quality of life*, *local networks* and *legacy*, as level-1 nodes, resting atop a hierarchy with 24 level-2 nodes and 11 level-3 nodes. The full framework is given in Appendix 3.

6.3.3 Visualisation and interpretation

The coding exercise in itself failed to indicate the underlying strength of expression of the references and whether they were positive or negative in relation to the topic addressed. I, therefore, introduced a bespoke sentiment categorisation, tested for validity using SPSS Reliability Analysis, to improve the interpretation. This enabled me to get the firm's eye view of the relative importance of all the factors considered both individually, by firm or organisation, and under different combinations.

This showed clearly that *talent* is the salient factor driving the PFR with 35% of total scores. It also served to emphasise, though, that the PFR in every situation comprises a mix of inter-related factors with here, overall, 18% down to *local networks*, 17% to *legacy*, 17% to *quality of life* and 13% to *ease of doing business*.

6.3.4 Results

The results from this exercise fall into two main categories. Firstly, there is the new model and attendant methodology. Because there is currently no comprehensive framework within which to define and analyse the PFR, a whole new model has been devised, a new approach created. This has been constructed from different strands of theory, from the collection of both qualitative and quantitative data, from bespoke systems of coding and visualisation and from refinement through application. This approach has proved effective, resilient, versatile and revelatory. Secondly, there are the results from the application of this new model amongst key strategic decision makers in financial services in Edinburgh and Glasgow. This has shown how the new approach can work in reality to produce significant insights about the PFR and calls to action in theory, policy and practice. Analysis of these two categories follows.

6.4 Analysis 1: Findings from Building the New Model

This study has drawn on a combination of literature from different disciplines and on data from the research process itself to identify the key success factors firms look for and recognise in their relationships with places. It has been possible to configure these components in key factor maps to facilitate their analysis by firm and by any number of

aggregations including place, types of business, age of business and others. From the analysis of this data, I have shown that the relationships between places and firms can be explained in a mix of factors that is unique in every PFR and liable to continual change. Each firm has its own PFR, no two are ever likely to be identical, but it is possible to discern trends and patterns through the aggregations of organisations' views on different bases. What has become clear from constructing this model, as shown in Figures 5-2 to 5-4 is that the PFR is a dynamic mix akin to the studies mentioned by Weber (1929), Porter (1998) and Dunning (1998) but one that is more complex and comprehensive than any presented before. The mix embraces current theory in strategic management and economic geography and adds new factors in *legacy*, in *affinity* and in *local impact*, for example, to make the picture more all-embracing.

What is also very clear is that, despite the complexity of the mix and its continually changing nature, it is also possible to map the PFR for individual firms/other types of organisation or aggregations of individual firms/other types of organisation to determine priorities and differences. This has been done using a bespoke framework to facilitate myriad lines of enquiry. It was evident from this exercise that managers are aware of the complexity of the PFR mix and alert to the need to have a balance across the factors that best aligns with their strategic priorities but what has been missing until now has been an overall framework within which to set this knowledge in a more systematic approach to this optimisation.

The complexity of the mix and the ability to adapt to changes make the mix stickier than might otherwise have been the case, stronger than the sum of the component parts, which can be advantageous or disadvantageous. A strong, solidly based PFR can yield cluster benefits for both firms and places or it can become too tight and exclusive of innovative forces resulting in lock-in and a tendency for firms to put off place-related decisions.

In developing a new process to understand the PFR and formulating a model to represent this there were both elements I would have expected and aspects I found surprising. These are summarised in Table 6-1 below.

Table 6-1 What is surprising in the model?

Not Surprising	Surprising
PFRs contribute significantly to creating and sustaining competitive advantage.	There is a blindness in Strategic Management to the role of place in competitive advantage; there is a gap in the literature.
Economic Geographers recognise the role of firms in the competitive advantage of places.	Economic Geographers appear reticent around management agency and firm differences in relation to competitive advantage; work in this area needs to be pursued more vigorously.
PFRs are defined by a variety of factors.	The PFR factor mix is seen here to be wider and more complex than previously considered.
PFRs vary by firm, place, industry, age of operation and type of operation and over time.	Individual and aggregated PFR profiles can be mapped from qualitative data and compared to reveal similarities and differences.

(Source: developed by the author)

6.5 Analysis 2: Findings from Applying the New Model

There were numerous patterns in the analysis of the empirical study worthy of further investigation but the following were most striking.

6.5.1 Networks, competition and collaboration

The analysis of local networks has revealed that, despite the focus of much recent academic and economic development interest, the role of networking in the Edinburgh and Glasgow clusters is relatively modest. Local networks clearly exist, operating rather differently in the two cities, but in neither case do they provide a basis for innovation, thought leadership, joint action or significant knowledge exchange. There is no lack of networking opportunities, of networking events and communication, but there is a lack of depth in the interaction.

This could be particular to financial services and perhaps an unintended consequence of the increased sensitivity in recent years about collusion in financial markets. The position is not as clear-cut as the restraining influence US anti-trust feeling has on the neglect of place considerations in strategic management, as previously discussed, but it is certainly a constraint on the free operation of a feature identified in much of the literature as central to the growth of the knowledge economy.

This constraint aside however, it is abundantly clear that most firms do not subscribe wholly to either the survival of the fittest model of strategic management nor the collectivist model

of economic geography. They follow a middle path involving adaptation and compromise akin to the evolutionary, crafted approach advocated by Mintzberg (1987) amongst others, but with a greater awareness of the wider range of strategy determining factors, especially in relation to place. They compete and they collaborate based on strategic priorities and managerial judgement as to what is most efficient and most acceptable in line with a goal of developing and sustaining competitive advantage.

6.5.2 The importance of talent

From this study of financial services businesses in Edinburgh and Glasgow it is clear that the dominant factor in the relationships for these firms in both cities at this point in time is talent. This is not surprising given the knowledge centred nature of the businesses and trends including the growth of the knowledge economy and the increasing significance of services.

Within this emphasis on talent, however, there are clear differences in interpretation as to how talent fits in the PFR. Whilst all parties recognise the benefits of a strong talent pool, firms focus on the immediate availability and recognise this is good for their needs in both cities; they value the availability/quality/cost mix. BSOs tend to look behind the immediate availability to what feeds this, focusing particularly on local education and, within this, an emphasis on the role of universities. Businesses and universities themselves, however, do not seem convinced that this connection is particularly strong, especially in terms of shared objectives, though that is not to say it is not important. There appears to be a dislocation here.

Scotland has a long history of producing more talent than it can use at home as noted, *inter alia*, by Herman (2001) and Devine (2006) but talent is a relatively fragile advantage. It is mobile and is not necessarily an asset that will embed a strong PFR. This underlines the importance of the mix of factors, even though talent predominates, and the need to ensure consensus across all players on both if and how the talent pipeline should be developed.

6.5.3 Edinburgh and Glasgow

It is clear in the interpretation of the importance of talent and of the other main factors that there are both similarities and differences in the Edinburgh and Glasgow PFRs that suggest, in themselves, different cluster models. Both are successful but with different priorities and *modi operandi*.

The Edinburgh model is more embedded in a long and successful history, in reputation, in being the headquarters of large and small Scottish financial businesses, in fostering a largely private sector support network strong on professional skills and connected at different social

and economic levels. It is more balanced across several factors and this suggests a more stable PFR. In Glasgow, the present cluster success is a more recent phenomenon despite the fact that the city has a long history of involvement in financial services and remains the headquarters of some major institutions. It is largely, though not exclusively, based on incoming investment in large service centres for major international businesses attracted predominantly by the availability/quality/cost formula in the local talent pool and stimulated and supported by regional and local government initiatives, including the International Financial Services District (IFSD) in the city.

The two cluster models show significant similarities as well as differences. Government intervention, the emphasis on cost-effective talent, the types of financial services operations, the nature of local networks and the city's particular legacy all work together for a successful formula in Glasgow that is quite different from that in Edinburgh. At the same time, several features including infrastructure, quality of life, and the priorities at the level of the five main themes are remarkably similar, indicative of factors shared at the national (Scottish) or at least central Scotland level. The cities build on combinations of individual characteristics, on combinations of shared characteristics and on combinations of the two combinations.

The Edinburgh cluster type based on more specialist, primarily headquarters operations is the more stable of the two with the PFR grounded in a more balanced way across the main factors, although it is facing challenges, especially around the loss of headquarters offices. By its nature it is also the most difficult to replicate. To create this type of cluster you need to have started three hundred years ago.

6.5.4 What is surprising in the application of the model

Table 6-2 below summarises the findings in terms of what is not surprising and what is. The findings that are not surprising are important in the context of validating the whole approach as it should be expected that common knowledge is reflected in any study. General feelings that can be gained from publicly available material and a few meetings are unlikely to be completely wrong. Most interesting, however, is what has been uncovered behind the common knowledge. This will not be surprising to everyone, but these findings are far from universally recognised.

Table 6-2 What is surprising in the application of the model?

Not Surprising	Surprising
Firms readily employ both competition and collaboration in their pursuit of competitive advantage.	Local networking is constrained by political and social forces to limit information exchange and collaboration. There is a move to broader, community engagement.
Talent is the most important factor in the PFR for financial services businesses in Edinburgh and Glasgow at this time.	There is a discontinuity between BSOs and firms (and universities) about talent. There are differing views as to where it comes from, what is needed for the future and how needs will be met.
Edinburgh and Glasgow are different.	Edinburgh and Glasgow are not different in all aspects, they have quite a lot in common. Their particular combinations of strengths however, can be seen in two quite different financial services cluster types.

(Source: developed by the author)

6.6 The Research Questions

This research has addressed the three questions posed in Chapter 1, section 1.6.

1. *What are the key factors in the place-firm relationship contributing to competitive advantage for UK finance firms?*

I have shown that the PFR is a complex mix of factors individual to each situation, to each firm, place and time, but subject to underlying patterns. The key factors fall into five broad categories, namely *ease of doing business*, *talent*, *quality of life*, *local networks* and *legacy*. The most important of these for financial services in Edinburgh and Glasgow is *talent*. The broad categories can be interpreted further in 35 sub-categories.

The fact that the study was based on the best performing areas in the UK in financial services, outside London, suggests that the findings may include lessons for the UK as a whole and particularly for UK finance firms outside London.

2. *How can we analyse these factors to make comparisons and identify patterns across firms, cities, sectors and other aggregations?*

A new framework for analysis has been developed to embrace all the PFR key factors to three levels of analysis. This framework can be populated with qualitative data

from practitioners which can be mapped to show the priorities for each firm or organisation. These key factor maps can be combined to show patterns across different levels of aggregation, for example for a place or a type of business or an industry.

3. *How can this contribute to a comprehensive view of the PFR combining theory from strategic management and economic geography?*

From the analysis using the new framework and, in particular, from the aggregations of factor maps along different lines of enquiry it has been possible to identify significant patterns, continuities and discontinuities. In the case of financial services in Edinburgh and Glasgow it is clear that talent is the greatest priority in the PFR but that there is a need to better define how this can be maintained as an advantage and extended. It is also clear that Edinburgh and Glasgow businesses work in different, compatible and effective cluster models with different implications for their maintenance; that the models combine different theoretical strands in balancing competition and co-operation and that they are less focused on networking and quality of life than might have been expected from the literature. Most of all it is apparent that the PFR is a complex mix of factors that is continually changing and that both firms and places need to regularly review the mix and adjust strategies and policies accordingly.

6.7 Contribution and Implications

This research was undertaken primarily with practitioners for practitioners. The findings have implications for theory, policy and practice however.

6.7.1 Theory

It is clear that there are gaps in thinking and literature on the PFR and its links to competitive advantage. More consideration needs to be given to place as a driver of corporate competitive advantage in strategic management and more consideration needs to be given to firms, and particularly firm differences and human agency, as drivers of the competitive advantage of places in economic geography. As a result of these gaps it has been difficult up until now to build a comprehensive picture of the PFR and therefore to help places and firms optimise this. This research contributes a new model to fill the gaps and develops a methodology to use this model in empirical testing. It employs an inter-disciplinary approach that borrows primarily from strategic management and economic geography but adds

factors derived from the application of the model including the new broad category of *Legacy* and the sub-categories of *affinity*, *cost of living* and *families* under *Quality of Life*.

In addition to bridging the gaps in theory the new model serves to underline the complexity of the PFR, how the PFR is unique for every firm and every place and every combination of these but also how underlying trends, priorities and differences can be discerned from different aggregations along different lines of enquiry. The PFR is complex but not unintelligible; it is possible to map variations, detect patterns, see common ground, identify cluster types, monitor changes over time and do much more to understand how it works.

Over and above contributing a new model for the PFR, this research has identified several strong theoretical themes from the application of the model. First, and foremost, is a clear illustration that firms do not see adversarial competition nor open-ended collaboration as exclusive routes to achieving competitive advantage, but rather they employ a judicious combination of the two. This finding is perhaps not surprising, but it underpins the need to revisit the PFR from an interdisciplinary point of view. An interesting aspect of this calculated balancing was the role of social, ethical and legal considerations in constraining action. Firms cannot be seen to be ruthlessly competitive at all costs, exploiting customers and suppliers and connections as well as beating rivals. Nor can they be seen to be co-operating too closely to the extent that free competition is impeded and undermined by insider information, cartel creation or market manipulation. This research will help firms better understand how this model works in practice.

Secondly, the importance of talent for competitive advantage to financial services businesses is clear. This is in line with much of the current theory in this area, although what attracts and holds talent is less clear. Quality of life and local networks have important roles but do not come across as being as significant as some of the literature might suggest. Various questions around talent arose including what gave rise to the advantageous positions of Edinburgh and Glasgow in this respect, what would be the future requirements and what roles could and should firms, BSOs and universities play in securing competitive advantage in this area for the future.

Thirdly, the comparison of financial services in Edinburgh and Glasgow, two centres with geographical proximity and a common macroeconomic environment underlined two, distinct cluster typologies, one that is more rooted in a path-dependent evolution and the other more dependent upon an interventionist renaissance. The analysis clearly indicated strong

similarities alongside marked differences which suggests fertile ground for further work in relation to existing cluster and agglomeration theory.

6.7.2 Policy

The empirical research involved primarily businesses but also took into account views from business support organisations, which could be considered to represent the places as well as the firms, and universities. The findings raise policy implications for these three groups.

For businesses the most important implication is to recognise the significance of place and the opportunities and threats different PFRs present in relation to competitive advantage. All the businesses referred to recognise the complexity of the PFR, can identify their priorities within it and have policies to improve their position, including through corporate social responsibility initiatives, engagement in local business networks and direct and indirect government lobbying. Few, however, appear to be making comparisons relating to options outside their existing situations. There is a sense of opportunism in seeing possibilities to expand activities locally and/or to disperse activities to other centres but a degree of inertia when it comes to the bigger picture, a lack of systematic alignment between strategy and geography. Firms should develop scenario plans for the wider implications of major changes like Brexit or international trade wars that take into account the full, present and potential PFRs and those of their competitors.

The same is true for business support organisations, BSOs. Their policies and plans in relation to the current time and place are well developed and appear to be delivering. It is less clear that there is a more granular understanding of the requirements, strengths and weaknesses of individual businesses and an on-going assessment of how these fit with place attributes and with the offerings of other places both close by and around the world. It is also less clear that these have been future-proofed against the range of possible macroeconomic scenarios on the horizon. This imposes limitations on strategies for the future. BSOs would benefit from a more holistic view of the PFR that embraces understanding the variety of motivations of individual firms at one end and the international competitive positioning of the place at the other. The judicious mixing of co-operation and competition employed by firms could be extended to places, for example between Edinburgh and Glasgow but also between the Scottish cities and comparable financial centres around the world. As with firms, there should be better alignment between strategy and geography and this should be done from a global perspective.

For government, both local and national, both sets of implications must be considered in policy development. On the one hand, governments should help resident firms, as corporate citizens, wherever they can to sustain and enhance competitive advantage. On the other hand, governments have a particular interest in the more general economic development of places, particularly in their work through BSOs/Development agencies. It falls to government to promote both sets of interests and, ideally, reconcile them.

The study produced especially pertinent questions around the different cluster types evident in Edinburgh and Glasgow. There is a fundamental question around whether or not business enhancing clusters can be created. The Edinburgh example suggests no; the Glasgow example suggests yes. This would appear to be worthy of further research. There is also the question raised in this thesis as to the complementarity of different clusters and whether clusters can work together for greater overall benefit. My feeling on this is very positive and recommendations in this area are detailed below under *Practice* but, as with other issues raised, further research would be required to validate this.

The input from universities was very modest and requires more detailed investigation but there were indications of differences of opinion as to where exactly universities fit in the PFR, both within the institutions themselves and across the range of partners. At one extreme is the idea of universities serving the local economy in the role of “talent factories”. At the other is the idea of universities as “ivory towers” largely independent of and remote from the local economy. The reality is, of course, in between but where and how this might be positioned is not clear.

6.7.3 Practice

The primary implication and recommendation in terms of practice is for businesses to consider more often and more systematically the opportunities and threats presented by where they are located and where they do business; for firms to maintain a geographical strategy based on PFR analysis. Place decisions are vitally important but are often taken in a rather piecemeal fashion without full consideration of the PFR. These decisions are then quite quickly embedded through inertia and the weight of real and emotional sunk costs. This is particularly true in times of political and economic turbulence, as is the case in Britain at present as we work through the Brexit process, where decisions are often reactive and based on limited information. It is vital to think about place optimisation and to do this in an informed and structured way. It is necessary, for example, to look beyond simply tax and regulatory issues and beyond only move and stay options. The PFR is complex and affects all aspects of doing business but it can be mapped, and adjustments can be made that offer

more than purely binary choices. There are also possibilities to change aspects of the place environment, to change the firm to better adapt to the place advantages or to redistribute resources and responsibilities in different ways across various locations. There are more pressures on firms today but also more options available. A recent example of this last strategic response comes from HSBC. In 2016 the bank announced, after much deliberation, that it would not be moving its headquarters from London back to Hong Kong despite the growing share of Asian business in its overall profits. It did, though, announce at almost the same time that it would be relocating 1,000 jobs from London to Paris as a response to Brexit (Knight & Wójcik, 2017). Similarly, the US bank Morgan Stanley is reportedly moving staff from London to Frankfurt, Paris and Dublin as a strategic response to Britain's exit from the European Union, (Goodley, 2017). It already has 8,000 employees over 14 centres in Europe and is just rebalancing in the light of political developments affecting its PFR in London relative to other locations. Closer to home, it was reported recently that Edinburgh asset managers Baillie Gifford had chosen to establish a Dublin offshoot, after also considering Luxembourg, to handle European business post-Brexit (Walker, 2018). Structured PFR evaluation can better inform choices and also highlight opportunities to learn from others.

Secondly, on the subject of talent, it is clear that there is convergence on its significance amongst Edinburgh and Glasgow financial services businesses but a lack of alignment on what, if anything, should be done to protect this advantage. Firms are interested in the ready availability. BSOs are interested in the future availability. Universities are concerned not to become talent factories. There is a disconnect in the talent pipeline. The efforts of universities and BSOs are not fully aligned and these, in turn, are not fully aligned to the needs of firms, which themselves are often poorly articulated and short-termist. It should be possible to reconcile these interests. The speed of technological progress, especially as highlighted in the fintech area, makes it difficult for firms to predict future needs exactly. Although a high priority today is given to technical and professional skills the future will be about having people who are adaptable and flexible, who are able to continually upgrade their skills and learn new skills, who can turn information into improved practice by asking the right questions. Management decision making used to be constrained by limited information; now it is constrained by having too much. People are needed who can interpret the increasing amounts of data available. Although there is significant evidence of good work in this broad area there is considerable scope for improvement. Firms should work with BSOs to make this a common objective and they both, in turn, should encourage universities to make this a priority. After all, this reflects a particular strength in Scotland and especially in

Glasgow down the ages, as noted in section 1.3.2. There is a legacy of a workforce able and keen to develop new skills, who are flexible and adaptable and usually competitively productive. Practice and policy in firms, BSOs and educational establishments should be geared to exploiting this strength to meet an uncertain future.

In terms of practice at the place level there are opportunities to work on the complementarity of the Edinburgh and Glasgow cluster models in line with a vision for a Scottish global city. Economic power is being drawn increasingly to the world's largest metropolitan areas and this is particularly true for financial centres. Neither Edinburgh nor Glasgow can compete in the top tier alone but together there is far more potential. Some financial services firms are already taking advantage of the cities' complementarity by dividing their operations between the two, based on their relative strengths and weaknesses. This could go further, perhaps to joint overseas representation and promotional trips akin to the work done by the *Luxembourg for Finance* and *Greater Zurich Area* organisations and to support for joint infrastructure projects. The possibilities have not gone unnoticed in the past and good work has been done to capitalise on similarities and complementarities but businesses need to be more engaged to help overcome the rigid and artificial territorial boundaries that limit the ability of government and government agencies to embrace the more flexible concept of place that is necessary. PFR analysis could be used in conjunction with scenario planning to identify the global positioning for the Edinburgh/Glasgow financial services nexus and the opportunities to co-operate and compete with other global centres.

Fourthly and lastly, financial services businesses in Edinburgh and Glasgow share the prospect of immense change arising from the innovative use of new technology, from new customer behaviour and from new competitors as noted in section 5.6. The PFR can help or hinder the ability to meet these changes successfully. Akin to the global city approach referred to above, leadership is needed to identify the strengths in both places to build on and, even more importantly, the actual or potential weaknesses to cut loose from. The worst possible future would be to try to preserve a PFR that has been fruitful but is no longer fit for purpose. This could lead to a lock-in against new forces with firms and BSOs working hand-in-hand in a downward spiral. In this context efforts also need to be made to engage more substantively with the broader technology company ecosystems in the two cities. There is a considerable amount of optimism about the possibilities to combine Scotland's strengths in financial services with its strengths in new technology development under the common heritage of abilities in innovation but there is a challenge to align the development trajectories in both areas, to combine the strengths.

6.8 Summary of Conclusions

This research has broken new ground in both creating a new model for analysing the PFR and in applying this model for financial services firms in Edinburgh and Glasgow. Table 6-3 following summarises the conclusions arising from both initiatives in terms of theory, policy and practice, bringing together the reflections of sections 6.4, 6.5, 6.6 and 6.7.

Table 6-3 Summary of Conclusions

	General	Particular to Edinburgh and Glasgow
Theory	1. A new, comprehensive model has been developed of the PFR.	1. Firms balance both co-operation and competition to achieve competitive advantage.
	2. A new methodology has been developed to apply this model to mapping the PFR by firm and by aggregations of firms in places, industry sectors and other combinations.	2. Talent is the most important factor in the PFR but this is interwoven with other factors in a dynamic relationship that requires further analysis.
	3. This mapping shows that the PFR is complex but also how it can be interpreted.	3. There are two distinct, successful cluster typologies in Edinburgh and Glasgow that show differences and similarities in almost equal measure.
Policy	1. Firms and BSOs need alignment between strategy and geography based on PFR analysis and scenario planning.	1. Firms need individual and collaborative strategies to deal with current pressures from Brexit, trade wars, nationalism and the growing economic momentum in the East. These strategies need to be well rounded in accommodating all aspects of the PFR and all options for improvement.
	2. This alignment should incorporate thinking about international comparisons and about the full range of PFR options beyond staying and moving, particularly geographic dispersal to spread risk.	2. Firms, BSOs and universities need to better align objectives and strategies for talent provision.
Practice	1. Firms should regularly assess their PFR and take steps to optimise their positions.	1. Firms, BSOs and educational institutions to take steps to support a talent stream of flexible and adaptable employees.
		2. Firms and BSOs should think of Edinburgh and Glasgow as one, virtual,

		global city and should use PFR analysis and scenario planning to identify opportunities for co-operation and/or exploiting competitive advantage with financial centres world-wide.
		3. Financial services firms need to engage more directly with other business sectors, particularly technology, to realise cross industry agglomeration benefits.

(Source: developed by the author)

6.9 Next Steps and Further Research

This research paints a picture of possibilities more than certainties. The possibility that we can model the place–firm relationship for individual companies and aggregate the findings in different ways to represent patterns for different places and different types of business at different times. The possibility that from this we can determine the strategic management priorities underpinning the different relationships and patterns that can influence action by both firms and those guiding local economic development towards competitive advantage. The possibility that in the real world firms follow pragmatic strategies balancing both competition and co-operation that cut across theories and academic disciplines. The possibility that, unsurprisingly, talent is at the centre of the PFR for financial services businesses but that there are discontinuities in the talent pipeline in the case of Edinburgh and Glasgow that are incompatible with this priority. The possibility that all PFRs are different but that you can discern certain typologies linking specific characteristics relating to the nature of the operation, whether or not it is a head office, the degree of government assistance and the relative importance of factors like legacy and networking. All these possibilities need to be investigated further, for a start with different businesses in the same industry in different places and then for different businesses in different industries in the same places.

More work could also be done on the importance attributed to talent. It is unclear that this is widely recognised as such a strong driver of the place decision, albeit within a complex mix of factors, and whether this is therefore a strength that is being properly nurtured and developed. The tripartite relationship between firms, government agencies and universities should be studied in this context, ideally on an interdisciplinary basis.

Further research is especially needed into the Edinburgh and Glasgow cluster models to determine in more detail what lies behind the typologies and whether the characteristics are generalisable to other places. There is also the intriguing possibility that the two types are indicative of different stages in a cluster life cycle. A possible progression could be that firms choose a location by chance or through incentivisation. Early success leads to an agglomeration effect and a virtuous circle much as Glasgow is seeing now. This matures over time and single operations turn into group head offices, the PFR becomes more balanced across other factors, behavioural factors lead to a degree of inertia. This is then disrupted by external forces of technological advance and consolidation. There are some signs of this in financial services in Edinburgh and Glasgow that would be worth pursuing, perhaps in line with recent thinking by Martin & Sunley on this life cycle approach (2011).

Other questions that have arisen that merit further consideration include the role of headquarters offices in cluster resilience, how firms manage strategies that balance both competition and co-operation, the positive and negative effects of ethical and social constraints on firm collaboration and the role of wider community engagement and firms' local impacts on cluster strength and competitive advantage. A possible next step will be to extend the work to financial services companies in London and engage in the wider debate around the growth of international financial services centres and global cities.

More immediately the findings here will be shared with the research participants to test reactions and validity with those involved. The feedback from this exercise will be taken into account in planning the next steps referred to above.

Most importantly, as the world enters a new period of upheaval and challenges to an old order characterised by free markets, liberal democracy and western capitalism it is particularly important for businesses to consider in an informed and systematic way how they can adapt to a future that is more unpredictable than ever. Part of this adaptation must be to take a more considered, informed and systematic view of the implications of geography for strategy, of the aspects of place-firm relationships that can assist in achieving competitive advantage.

References

- Abrami, R. M., Kirby, W. C. & McFarlan, F. W., 2014. Why China Can't Innovate. *Harvard Business Review*, 92(3), pp. 107-111.
- Acemoglu, D. & Robinson, J. A., 2012. *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. 1 ed. London: Profile Books Limited.
- Adler, P. S., 2005. Market, Hierarchy and Trust: The Knowledge Economy and the Future of Capitalism. In: C. Grey & H. Wilmott, eds. *Critical Management Studies: A Reader*. New York: Oxford University Press, pp. 171-208.
- Adler, P. S. & Heckscher, C., 2005. *Towards Collaborative Community*. [Online] Available at: <http://www-bcf.usc.edu/~padler/> [Accessed 23 11 2017].
- Ahmad, K., 2011. *Affective Computing and Sentiment Analysis: Emotion Metaphor and Terminology*. 1 ed. New York: Springer.
- Alcázar, J. & Chung, W., 2014. Location Strategies for Agglomeration Economies. *Strategic Management Journal*, Volume 35, pp. 1749-1761.
- Ansoff, H. I., 1965. *Corporate Strategy*. 1 ed. New York: McGraw Hill.
- Ark, B. v. & Pilat, D., 1993. Productivity Levels in Germany, Japan, and the United States: Differences and Causes. *Brookings Papers: Microeconomics* 2, pp. 1-69.
- Arksey, H. & Knight, P., 1999. *Interviewing for Social Scientists*. 1 ed. Thousand Oaks: Sage.
- Bagnasco, A., 1977. *Tre Italie. La Problematica Territoriale dello Sviluppo Italiano*. 1 ed. Bologna: Il Mulino.
- Baritz, L., 2005. The Servants of Power. In: C. Grey & H. Wilmott, eds. *Critical Management Studies: A Reader*. New York: Oxford University Press, pp. 29-45.
- Barnes, T. J., 2000. Inventing Anglo-American Economic Geography, 1889 – 1960. In: E. Sheppard & T. J. Barnes, eds. *A Companion to Economic Geography*. Oxford: Blackwell, pp. 11-26.
- Barnes, T. J., 2001. Retheorising Economic Geography: from the Quantitative Revolution to the "Cultural Turn". *Annals of the Association of American Geographers*, 91(3), pp. 546-565.
- Barney, J., 1991. Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), pp. 99-120.
- Bathelt, H., Malmberg, A. & Maskell, P., 2004. Clusters and knowledge: local buzz, global pipelines and the process of knowledge creation. *Progress in Human Geography*, 28(1), pp. 31-56.
- Becerra-Fernandez, I. & Sabherwal, R., 2015. *Knowledge Management: Systems and Processes*. 2 ed. New York: Routledge.

- Beugelsdijk, S. & Mudambi, R., 2013. MNE as border-crossing multi-location enterprises: The role of discontinuities in geographic space. *Journal of International Business Studies*, 44(5), pp. 413-426.
- Bianchini, F., 1991. The Third Italy: Model or myth. *Ekistics*, 58(350/351), pp. 336-345.
- Blaikie, N., 2010. *Designing Social Research*. 2 ed. Cambridge: Polity Press.
- Boschma, R., 2004. Competitiveness of Regions from an Evolutionary Perspective. *Regional Studies*, 38(9), pp. 1001-1014.
- Boschma, R. & Frenken, K., 2006. Why is economic geography not an evolutionary science?. *Journal of Economic Geography*, 6(3), pp. 273-302.
- Bryman, A., 2012. *Social Research Methods*. 4 ed. Oxford: Oxford University Press.
- Buchan, J., 2003. *Capital of the Mind: How Edinburgh Changed the World*. 1 ed. London: John Murray.
- Cantwell, J., 2009. Location and the Multinational Enterprise. *Journal of International Business Studies*, pp. 35-41.
- Carey, A., 1967. The Hawthorne Studies: A Radical Criticism. *American Sociological Review*, 32(3), pp. 403-416.
- Cartwright, W. R., 1993. Multiple Linked "Diamonds" and the International Competitiveness of Export-Dependent Industries: The New Zealand Experience. *MIR: Management International Review*, 33(2), pp. 55-70.
- Cartwright, W. R., D'Cruz, J. R., Dunning, J. H. & Rugman, A. M., 1993. Extensions of the Porter Diamond Framework. *Management International Review*, Volume 33.
- Chandler, A. D., 1962. *Strategy and Structure: Chapters in the History of the Industrial Enterprise*. 1 ed. Cambridge, Massachusetts: MIT Press.
- Chandler, A. D., 1977. *The Visible Hand*. 1 ed. Cambridge: Harvard University Press.
- Checkland, S. G., 1975. *Scottish Banking A History, 1695-1973*. 1 ed. Glasgow: Collins.
- Chisholm, G. G., 1889. *Handbook of Commercial Geography*. London and New York: Longman, Green & Co..
- Cho, D.-S. & Moon, H.-C., 2013. *From Adam Smith to Michael Porter: Evolution of Competitiveness Theory*. 1 ed. Singapore: World Scientific Publishing Co. Pte. Ltd..
- Chorley, R. J. & Haggett, P., 1967. *Socio-Economic Models in Geography*. 1 ed. London: Methuen & Co. Ltd..
- Clarivate Analytics, 2018. *Web of Science*. [Online]
Available at:
http://apps.webofknowledge.com.ezproxy.is.ed.ac.uk/Search.do?product=WOS&SID=E623oeNLjpVgdNAatyF&search_mode=GeneralSearch&prID=7597912e-d205-410b-b05b-0ffa92f2a39a
[Accessed 14 February 2018].

- Clark, G. L., Feldman, M. P. & Gertler, M. S., 2000. Economic Geography: Transition and Growth. In: 1, ed. *The Oxford Handbook of Economic Geography*. Oxford: Oxford University Press, pp. 3-17.
- Clegg, S., Carter, C., Kornberger, M. & Schweitzer, J., 2011. *Strategy: Theory and Practice*. 1 ed. London: SAGE Publications Ltd..
- Coe, N. M., Kelly, P. F. & Yeung, H. W., 2007. *Economic Geography: A Contemporary Introduction*. 1 ed. Malden: Blackwell Publishing Ltd..
- Coeurderoy, R. & Murray, G., 2008. Regulatory Environments and the Location Decision: Evidence from the Early Foreign Market Entries of New-Technology-based Firms. *Journal of International Business Studies*, pp. 670-687.
- Collins, J., 2001. *Good to Great*. 2 ed. London: Random House.
- Collins, J. & Porras, J., 2005. *Built to Last : Successful Habits of Visionary Companies*. 1 ed. London: Random House Business.
- Cooke, P. & Morgan, K., 1998. *The Associational Economy*. 1 ed. Oxford: Oxford University Press.
- Cummings, S. & Bridgman, T., 2016. The Limits and Possibilities of History: How a Wider, Deeper, and More Engaged Understanding of Business History Can Foster Innovative Thinking. *Academy of Management: Learning & Education*, 15(2), pp. 250-267.
- Dalkir, K., 2017. *Knowledge Management in Theory and Practice*. 3 ed. Cambridge: MIT Press.
- David, P. A., 1985. Clio and the Economics of QWERTY. *The American Economic Review*, 75(2), pp. 332-337.
- Davies, H. & Ellis, P., 2000. Porter's "Competitive Advantage of Nations": Time for a final judgment?. *Journal of Management Studies*, 37(8), pp. 1189-1213.
- Devine, T. M., 2003. *Scotland's Empire 1600-1815*. 1 ed. London: Penguin Group.
- Devine, T. M., 2006. *The Scottish Nation: A Modern History (ebook)*. 2 (1st ed. 1999) ed. London: Penguin Books.
- Dicken, P., 2011. *Global Shift: Mapping the Changing Contours of the World Economy*. 6 (1st ed. 1986) ed. London: Sage Publications.
- Dow, J. B., 1972. *Early Actuarial Work in Eighteenth Century Scotland*, Edinburgh: The Faculty of Actuaries.
- Drucker, P. F., 1946. *The Concept of the Corporation*. 1 ed. New York: John Day.
- Drucker, P. F., 1955. *The practice of management*. London: Heinemann.
- Dunning, J. H., 1980. Toward an Eclectic Theory of International Production. *Journal of International Business Studies*, 11(1), pp. 9-31.
- Dunning, J. H., 1993. Internationalizing Porter's Diamond. *MIR: Management International Review*, 33(2), pp. 7-15.

- Dunning, J. H., 1998. Location and the Multinational Enterprise: A Neglected Factor?. *Journal of International Business Studies*, 29(1), pp. 45-66.
- Dyer, J. & Singh, H., 1998. The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *The Academy of Management Review*, 23(4), pp. 660-679.
- Ferguson, A., 1782. *An Essay on the History of Civil Society*. 5 ed. London: T. Cadell.
- Fernhaber, S. A., Gilbert, B. A. & McDougall, P. P., 2008. International Entrepreneurship and Geographic Location: An Empirical Examination of New Venture Internationalization. *International Business Studies*, Volume 39, pp. 267-290.
- Finfgeld-Connett, D., 2013. Use of content analysis to conduct knowledge-building and theory-generating qualitative systematic reviews. *Qualitative Research*, 14(3), pp. 341-352.
- Fischer, B. & Simon, D., 2016. *How Chinese Companies Disrupt Through Business Model Innovation*. Vienna, Harvard Business Review (Drucker Forum 2016).
- Florida, R., 2002. The Economic Geography of Talent. *Annals of the Association of American Geographers*, 92(4), pp. 743-755.
- Florida, R., 2009. *Who's Your City? How the Creative Economy is Making Where You Live the Most Important Decision of Your Life*. 1 ed. New York: Basic Books.
- Florida, R., 2012. *The Rise of the Creative Class Revisited*. 2 ed. New York: Basic Books.
- Ford, H., 1922. *My Life and Work*. New York: Doubleday, Page & company.
- Foss, N. J., 2011. The evolution and eclecticism of Porter's thinking. In: R. Huggins & H. Izushi, eds. *Competition, Competitive Advantage, and Clusters: The Ideas of Michael Porter*. Oxford: Oxford University Press, pp. 93-107.
- Fransman, M., 2007. *Edinburgh, City of Funds*. 1 ed. Edinburgh: Kokoro.
- Freedman, L., 2013. *Strategy: A History*. 1 ed. Oxford: Oxford University Press.
- Frenken, K., Cefis, E. & Stam, E., 2015. Industrial Dynamics and Clusters: A Survey.. *Regional Studies*, 49(1), pp. 10-27.
- Friedman, T. L., 2005. *The World is Flat: The Globalized World in the Twenty-first Century*. 1 ed. New York: Farrar, Strauss and Giroux.
- Fry, M., 2009. *Edinburgh: A History of the City*. 1 ed. Basingstoke and Oxford: Pan Macmillan Ltd..
- Fry, M., 2017. *Glasgow: A History of the City*. London: Head of Zeus Ltd..
- Fujita, M. & Krugman, P., 2004. The new economic geography: Past, present and future. *Regional Science*, Volume 83, pp. 139-164.
- Geus, A. P. d., 1999. *The Living Company : Growth, Learning and Longevity in Business*. 1 ed. London: Nicholas Brealey Publishing.
- Ghuri, P. & Grønhaug, K., 2005. *Research Methods in Business Studies*. Harlow: Prentice Hall.

- Glaeser, E., 2011. *The Triumph of the City*. 1 ed. Basingstoke: Macmillan.
- Glaeser, E. L., Kallal, H. D., Scheinkman, J. A. & Shleifer, A., 1992. Growth in Cities. *Journal of Political Economy*, 100(6), pp. 1126-1152.
- Goerzen, A., Asmussen, C. G. & Nielsen, B. B., 2013. Global Cities and Multinational Enterprise Location Strategy. *Journal of International Business Studies*, pp. 427-450.
- Goodley, S., 2017. Morgan Stanley picks Frankfurt as post-Brexit hub. *The Guardian*, 19 July.
- Gordon, I. R. & McCann, P., 2000. Industrial Clusters: Complexes, Agglomeration and/or Social Networks. *Urban Studies*, 37(3), pp. 513-532.
- Grant, R. M., 2011. National economic development and The Competitive Advantage of Nations . In: R. Huggins & H. Izushi, eds. *Competition, Competitive Advantage, and Clusters: The Ideas of Michael Porter* . Oxford: Oxford University Press, pp. 111-130.
- Grein, A. & Craig, C., 1996. Economic Performance Over Time : Does Porter' s Diamond Hold at the National Level ?. *The International Executive*, 38(3), pp. 303-322.
- Grey, C. & Wilmott, H., 2005. Introduction. In: C. Grey & H. Wilmott, eds. *Critical Management Studies: A Reader*. 1 ed. Oxford: Oxford University Press, pp. 1 - 15.
- Hai-Jew, S., 2017. Employing the Sentiment Analysis Tool in Nvivo 11 Plus on Social Media Data: Eight Initial Case Types. In: N. R. Rao, ed. *Social Media Listening and Monitoring for Business Application*. Hershey: IGI Global, pp. 175-244.
- Hall, S., 2017. Rethinking international financial centres through the politics of territory: renminbi internationalisation in London's financial district. *Transactions of the Institute of British Geographers*, Volume 42, pp. 489-502.
- Hamel, G. & Prahalad, C., 1994. *Competing for the Future*. 1 ed. Boston: Harvard Business Review Press.
- Hamilton, F. I., 1967. Models of Industrial Location. In: R. J. Chorley & P. Haggett, eds. *Socio-Economic Models in Geography*. London: Methuen & Co. Ltd., pp. 361-424.
- Hampden-Turner, C. & Trompenaars, F., 1993. *The Seven Cultures of Capitalism*. 1 ed. Doubleday: New York.
- Harris, C. D., 1954. The Market as a Factor in the Localization of Industry in the United States. *Annals of the Association of American Geographers*, 44(4), pp. 315-348.
- Harrison, J. & Turok, I., 2017. Universities, knowledge and regional development. *Regional Studies*, 51(7), pp. 977-981.
- Healey, M. & Dunham, P., 1994. Changing Competitive Advantage in a Local Economy: The Case of Coventry, 1971–90. *Urban Studies*, 31(8), pp. 1279-1301.
- Health, G. C. f. P., 2018. *Understanding Glasgow : Population Estimates*. [Online] Available at: http://www.understandingglasgow.com/indicators/population/trends/historic_population_trend [Accessed 29 July 2018].

- Henderson, B. D., 1989. The Origin of Strategy. *Harvard Business Review*, Volume November-December, pp. 139-143.
- Henrich, J. et al., 2001. In search of Homo economicus : behavioral experiments in 15 small-scale societies. *The American Economic Review*, 91(2), pp. 73-78.
- Henry, N. & Pinch, S., 2000. Spatialising knowledge: placing the knowledge community of Motor Sport Valley. *Geoforum*, 31(2), pp. 191-208.
- Herman, A., 2001. *How the Scots Invented the Modern World: The True Story of How Western Europe's Poorest Nation Created Our World & Everything in It*. 1 ed. New York: Three Rivers Press.
- Herrington, J. D., 2010. MBA: past, present and future. *Academy of Educational Leadership Journal*, 14(1), pp. 63-76.
- Hoover, R. S. & Koerber, A. L., 2011. Using NVivo to Answer the Challenges of Qualitative Research in Professional Communication: Benefits and Best Practices. *IEEE Transactions on Professional Communication*, 54(1), pp. 68-82.
- Howarth, S., 1997. *A Century in Oil : The Shell Transport and Trading Company 1897 - 1997*. 1 ed. London: Weidenfield and Nicolson.
- Huggins, R. & Izushi, H., 2011. *Competition, Competitive Advantage, and Clusters: The Ideas of Michael Porter*. 1 ed. Oxford: Oxford University Press.
- Hylton, K. N., 2003. *Antitrust Law Economic Theory and Common Law Evolution*. Cambridge: Cambridge University Press.
- IFSD, G., 2017. *IFSD Glasgow*. [Online]
Available at: <http://www.ifsdglasgow.co.uk/>
[Accessed 15 December 2016].
- Jacobs, J., 1969. *The economy of cities*. 1 ed. New York: Vintage Books.
- James, A., 2005. Demystifying the role of culture in innovative regional economies.. *Regional Studies*, 39(9), pp. 1197-1216.
- Jenkins, M. & Tallman, S., 2012. The Shifting Geography of Competitive Advantage: Clusters, Networks and Firms. *Journal of Economic Geography*, 10(4), pp. 599-618.
- Johnson, G., Scholes, K. & Whittington, R., 2008. *Exploring Corporate Strategy (e-book)*. 8 ed. Harlow: Pearson Education Limited.
- Kaplan, R. S. & Norton, D. P., 2008. *The Execution Premium: Linking Strategy to Operations for Competitive Advantage*. 1 ed. Boston: Harvard Business Press.
- Katona, G. & Morgan, J., 1952. The Quantitative Study of the Factors Determining Business Decisions. *Quarterly Journal of Economics*, pp. 67-90.
- Kauflin, J., 2017. *America's Top 50 Companies 1917 - 2017*. [Online]
Available at: <https://www.forbes.com/sites/jeffkauflin/2017/09/19/americas-top-50-companies-1917-2017/#347d3a141629>
[Accessed 17 October 2017].

- Kay, J., 1991. Economics and Business. *Economic Journal*, Volume Special Issue, pp. 57-63.
- Kay, J., 1993. A Brief History of Business Strategy. In: J. Kay, ed. *Foundations of Corporate Success*. Oxford: Oxford University Press, pp. 337-363.
- Ketels, C. H., 2011. 10 Clusters and competitiveness: Porter's contribution. In: R. Huggins & H. Izushi, eds. *Competition, Competitive Advantage, and Clusters: The Ideas of Michael Porter*. Oxford: Oxford University Press, pp. 173-190.
- Kharub, M. & Sharma, R., 2017. Comparative analyses of competitive advantage using Porter diamond model (the case of MSMEs in Himachal Pradesh). *Competitiveness Review*, 27(2), pp. 132-160.
- Khoo, C. S., Nourbakhsh, A. & Jin-Cheon Na, 2013. Sentiment analysis of online news text: a case study of appraisal theory. *Online Information Review*, 36(6), pp. 858-878.
- Kim, W. C. & Mauborgne, R., 2014. *Blue Ocean Strategy, Expanded Edition: How to Create Uncontested Market Space and Make the Competition Irrelevant*. 1 ed. Cambridge: Harvard Business Review Press.
- Kitson, M., Martin, R. & Tyler, P., 2004. Regional Competitiveness: An Elusive yet Key Concept?. *Regional Studies*, 38(9), pp. 991-999.
- Kitzinger, J., 1994. The Methodology of Focus Groups: The Importance of Interaction between Research Participants. *Sociology of Health and Illness*, Volume 16, pp. 103-121.
- Knight, E. & Wójcik, D., 2017. Geographical linkages in the financial services industry: a dialogue with organizational studies. *Regional Studies*, 51(1), pp. 116-127.
- Knights, D. & Morgan, G., 1991. Corporate Strategy, Organizations and Subjectivity: A Critique. *Organization Studies*, 12(2), pp. 251-273.
- Konsolas, I., 2018. *The Competitive Advantage of Greece: An Application of Porter's Diamond*. 2 (reissue 1st ed. 2002) ed. Abingdon: Routledge.
- Krätke, S., 2010. 'Creative Cities' and the Rise of the Dealer Class. *International Journal of Urban and Regional Research*, 34(4), pp. 835-853.
- Krugman, P., 1990. *Rethinking international trade*. Cambridge: MIT Press.
- Krugman, P., 1991. *Geography and trade*. 1 ed. London: Leuven University Press.
- Krugman, P., 1994. Competitiveness: A Dangerous Obsession. *Foreign Affairs*, 73 March/April(2), pp. 28-44.
- Krugman, P., 1995. *Development, Geography and Economic Theory*. 1 ed. Cambridge: The MIT Press.
- Kvale, S., 1996. *Interviews: An Introduction to Qualitative Research Interviewing*. 1 ed. Thousand Oaks: Sage.
- Launhardt, W., 1882. Die Beatimmung des zweckmässigsten Standortes einer gewerblichen Anlage. *Zeitschriß des Verlines deutscher Ingenieuæ*, 26(3), pp. 105-116.
- Lazzarini, S. G., 2015. Strategising by the government: can industrial policy create firm-level competitive advantage. *Strategic Management Journal*, Volume 36, pp. 97-112.

- Leamer, E. E. & Storper, M., 2001. The Economic Geography of the Internet Age. *Journal of International Business Studies*, 32(4), pp. 641-665.
- Leibold, M., Probst, G. J. B. & Gibbert, M., 2005. *Strategic Management in the Knowledge Economy*. 2 ed. Erlangen: Publicis.
- Levitt, S. D. & List, J. A., 2011. Was There Really a Hawthorne Effect at the Hawthorne Plant? An Analysis of the Original Illumination Experiments. *American Economic Journal: Applied Economics*, Volume 3, pp. 224-238.
- Lubit, R., 2001. Tacit knowledge and knowledge management: the keys to sustainable competitive advantage. *Organizational Dynamics*, 29(4), pp. 164-178.
- Lynch, R., 2006. *Corporate Strategy*. 4th ed. Harlow: Prentice Hall.
- Malanga, S., 2004. The curse of the creative class. *City Journal*, Volume Winter, pp. 36-45.
- Malmberg, A. & Maskell, P., 2002. The elusive concept of localization economies: towards a knowledge based theory of spatial clustering.. *Environment and Planning A*, 34(3), pp. 429-449.
- March, J. G. & Simon, H., 1958. *Organisations*. 1 ed. New York: Wiley.
- Marcuse, P., 2003. Review of The Rise of the Creative Class by Richard Florida. *Urban Land*, Volume 62, pp. 40-41.
- Marglin, S. A. & Schor, J. B., 1990. *The Golden Age of Capitalism: Reinterpreting the Postwar Experience*. 1 ed. New York: Oxford University Press.
- Markusen, A., 1996. Sticky Places in Slippery Space: A Typology of Industrial Districts.. *Economic Geography*, 72(3), pp. 293-313.
- Marshall, A., 1st ed. 1890. *Principles of Economics (ebook)*. 8th, 1920 ed. Cambridge: Digireads.com (this edition 2012).
- Martin, I., 2014. *Making it Happen: Fred Goodwin, RBS and the men who blew up the British economy*. 1 ed. London: Simon & Schuster UK.
- Martin, R. & Sunley, P., 1996. Paul Krugman's Geographical Economics and Its Implications for Regional Development Theory: A Critical Assessment. *Economic Geography*, 72(3), pp. 259-292.
- Martin, R. & Sunley, P., 2003. Deconstructing clusters: chaotic concept or policy panacea?. *Journal of Economic Geography*, 3(1), pp. 5-35.
- Martin, R. & Sunley, P., 2011. Conceptualizing Cluster Evolution: Beyond the Life Cycle Model?. *Regional Studies*, 45(10), pp. 1299-1318.
- Maskell, P., 2001. Towards a knowledge-based theory of the geographical cluster.. *Industrial and Corporate Change*, 10(4), pp. 921-943.
- Mason, J., 1996. *Qualitative Researching*. 1 ed. Thousand Oaks: Sage.
- Maull, H. W., 1990. Germany and Japan: The New Civilian Powers. *Council on Foreign Relations*, 69(5), pp. 91-106.

- Maxwell, J. A. & Mittapalli, K., 2011. Realism as a stance for mixed methods research. In: *A Realist Approach to Qualitative Research*. Fairfax: George Mason University, pp. 145-167.
- Mayo, E., 1933. *The Human Problems of an Industrial Civilization*. 1 ed. New York: MacMillan.
- Mazzucato, M., 2014. *The Entrepreneurial State : Debunking Public vs. Private Sector Myths*. 2 ed. London: Anthem Press.
- McDonald, D., 2017. *The Golden Passport: Harvard Business School, the Limits of Capitalism, and the Moral Failure of the MBA Elite*. 1 ed. New York: Harper Business.
- McKenna, C. D., 2006. *The World's Newest Profession*. Cambridge: Cambridge University Press.
- Mintzberg, H., 1987. Crafting Strategy. *Harvard Business Review*, Volume July-August, pp. 66-75.
- Mintzberg, H., 1994. *The Rise and Fall of Strategic Planning*. 1 ed. London: Prentice Hall Europe.
- Moss, M., 2000. *Standard Life, 1825-2000: The Building of Europe's Largest Mutual Life Company*. 1 ed. Edinburgh: Mainstream Publishing.
- Moss, M. & Russell, I., 1994. *An Invaluable Treasure: A History of the TSB*. 1 ed. London: George Weidenfield and Nicolson Limited.
- Munday, J., 2006. Identity in Focus: The Use of Focus Groups to Study the Construction of Collective Identity. *Sociology*, Volume 40, pp. 89-105.
- Newlands, D., 2003. Competition and Cooperation in Industrial Clusters: The Implications for Public Policy. *European Planning Studies*, 11(5), pp. 521-532.
- NYSE, 2018. *Facts and Figures - NYSE Historical Statistics - Share ownership in the U.S.* [Online]
Available at: <http://www.nyxdata.com/Data-Products/Facts-and-Figures>
[Accessed 14 February 2018].
- O'Shaughnessy, N. J., 1996. Michael Porter's Competitive Advantage revisited. *Management Decision*, 34(6), pp. 12-20.
- Oakey, R. P., 1984. *High Technology Small Firms*. 1 ed. London: Frances Pinter.
- Oakey, R., Rothwell, R. & Cooper, S., 1988. *The Management of Innovation in High-Technology Small Firms: Innovation and Regional Development in Britain and the United States*. 1 ed. Westport: Quorum Books.
- ONS, 2015. *Table 6: Gross Value Added (Income Approach) by SIC07 industry at current basic prices*. [Online]
Available at:
<http://webarchive.nationalarchives.gov.uk/20160105170823/http://www.ons.gov.uk/ons/rel/regional-accounts/regional-gross-value-added-income-approach-/december-2015/stb-regional-gva-dec-2015.html>
[Accessed December 2015].

Ottati, G. D., 1994. Cooperation and competition in the industrial district as an organisation model. *European Planning Studies*, 2(4), pp. 463-483.

Öz, Ö., 2002. Assessing Porter's framework for national advantage : the case of Turkey. *Journal of Business Research*, 55(6), pp. 509-516.

Pascale, R. T., 1978. Communication and Decision Making Across Cultures: Japanese and American Comparisons. *Administrative Science Quarterly*, 23(1), pp. 91-110.

Pascale, R. T., 1978. Zen and the art of management. *Harvard Business Review*, 56(2), pp. 153-162.

Pascale, R. T. & Athos, A. G., 1982. *The Art of Japanese Management*. Harmondsworth: Penguin.

Paulus, T. M., Lester, J. N. & Britt, V. G., 2013. Constructing Hopes and Fears Around Technology. A Discourse Analysis of Introductory Qualitative Research Texts. *Qualitative Inquiry*, 19(9), pp. 639-651.

Peck, J., 2005. Struggling with the Creative Class. *International Journal of Urban and Regional Research*, 29(4), pp. 740-770.

Penrose, E., 1959. *The Theory of the Growth of the Firm*. 1 ed. New York: John Wiley and Sons.

Perman, R., 2013. *Hubris: How HBOS wrecked the best bank in Britain*. 1 ed. Edinburgh: Birlinn Ltd..

Perreur, J., 1998. Industrial location theory in German thought - Launhardt and Weber. *Recherches Economiques de Louvain*, 64(1), pp. 75-98.

Peters, T. J. & Waterman, R. H., 1982. *In search of excellence: lessons from America's best run companies*. 1 ed. New York: Harper & Row.

Piore, M. J. & Sabel, C. F., 1984. *The Second Industrial Divide: Possibilities for Prosperity*. 1 ed. USA: Basic Books.

Porter, M. E., 1979. How competitive forces shape strategy. *Harvard Business Review*, Volume March-April, pp. 137-145.

Porter, M. E., 1980. *Competitive Strategy : Techniques for Analyzing Industries and Competitors*. 1 ed. New York: Free Press.

Porter, M. E., 1985. *Competitive Advantage : Creating and Sustaining Superior Performance*. 1 ed. New York: Free Press.

Porter, M. E., 1998. *The Competitive Advantage of Nations*. 2nd (1st ed 1990) ed. Basingstoke: Macmillan Press Ltd.

Porter, M. E., 2000. Location, Competition and Economic Development: Local Clusters in a Global Economy. *Economic Development Quarterly*, 14(1), pp. 15-34.

Porter, M. E., 2000. Locations, Clusters and Company Strategy. In: G. L. Clark, M. P. Feldman & M. S. Gertler, eds. *The Oxford Handbook of Economic Geography*. Oxford: Oxford University Press, pp. 253-274.

- Porter, M. E. & Sölvell, Ö., 1999. The Role of Geography in the Process of Innovation and the Sustainable Competitive Advantage of Firms . In: A. D. Chandler, P. Hagstrom & a. Ö. Sölvell, eds. *The Dynamic Firm*. Oxford: Oxford University Press, pp. 440-458 (chapter 19).
- Prahalad, C. & Hamel, G., 1990. The Core Competence of the Corporation. *Harvard Business Review*, Volume May-June, pp. 79-90.
- Regnér, P. & Zander, U., 2014. International Strategy and Knowledge Creation: The Advantage of Foreignness and Liability of Concentration. *British Journal of Management*, Volume 25, pp. 551-569.
- Ricardo, D., 1821. *On the Principles of Political Economy and Taxation (ebook)*. 3rd ed. s.l.:Heraklion Press.
- Ritchie, B., 1999. *Good Company : The Story of Scottish and Newcastle*. 1 ed. London: James & James (Publishers) Ltd.
- Rubin, H. J. & Rubin, I. S., 2012. *Qualitative Interviewing: The Art of Hearing Data*. 3 ed. Thousand Oaks: Sage.
- Rugman, A. M. & D'Cruz, J. R., 1993. The "Double Diamond" Model of International Competitiveness: The Canadian Experience. *MIR: Management International Review*, Volume 33, Extensions of the Porter Diamond Framework, pp. 17-39.
- Sassen, S., 2012. *Cities in a World Economy (Sociology for a New Century Series)*. 4 ed. Los Angeles: SAGE Publications.
- Saxenian, A., 1994. *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. 1 ed. Cambridge: Harvard University Press.
- Saxenian, A., 1996. Inside-Out: Regional Networks and Industrial Adaptation in Silicon Valley and Route 128. *Cityscape: A Journal of Policy Development and Research • Volume 2, Number 2 • May 1996*, 2(2), pp. 41-60.
- Schoenberger, E., 1997. *The Cultural Crisis of the Firm*. 1 ed. Cambridge: Blackwell Publishers Ltd.
- Schoenberger, E., 2001. Corporate Biographies: the narrative strategies of corporate strategists. *Journal of Economic Geography*, Volume 1, pp. 277-298.
- Schotter, A. & Beamish, P. W., 2013. The Hassle Factor: An Explanation for Managerial Locational Shunning. *Journal of International Business Studies*, pp. 521-544.
- Schumpeter, J., 1942. *Capitalism, Socialism and Democracy (ebook)*. this edition 2012 ed. s.l.:Start Publishing LLC.
- Scott, A. J., 1988. Flexible production systems and regional development: the rise of new industrial spaces in North America and Western Europe. *International Journal of Urban and Regional Research*, Volume 12, pp. 171-186.
- Scott, A. J., 2000. Economic Geography: The Great Half Century. In: G. L. Clark, M. P. Feldman & M. S. Gertler, eds. *The Oxford Handbook of Economic Geography*. Oxford: Oxford University Press, pp. 18-44.

- Scott, A. J., 2014. Beyond the creative city: cognitive-cultural capitalism and the new urbanism. *Regional Studies*, 48(4), pp. 565-578.
- Senge, P. M., 1992. *The Fifth Discipline*. 2 ed. London: Century Business.
- Servan-Schreiber, J.-J., 1967. *Le Défi Américain*. 1 ed. Paris: Editions Denoel.
- Sheppard, E. & Barnes, T. J., 2000. The Art of Economic Geography. In: *A Companion to Economic Geography*. Oxford: Blackwell Publishers Ltd., pp. 1-8.
- Shrout, P. E. & Fleiss, J. L., 1979. Intraclass Correlations: Uses in Assessing Rater Reliability. *Psychological Bulletin*, 86(2), pp. 420-428.
- Simmie, J., 2006. Do clusters or innovation systems drive competitiveness?. In: B. Asheim, P. Cooke & R. Martin, eds. *Clusters and Regional Development: Critical reflections and explorations*. Abingdon: Routledge, pp. 164-187.
- Slater, R., 1999. *Jack Welch and the GE Way*. 1 ed. New York: McGraw-Hill.
- Sloan, A. P., 1964. *My Years with General Motors*. 1 ed. Garden City, New York: Doubleday.
- Smith, A., 1776. *An Inquiry into the Nature and Causes of the Wealth of Nations (ebook)*. London: Wordsworth Editions (this edition 2012).
- Smith, E., 2018. Coping with techlash. *The Economist*, 20 January, pp. e-copy.
- Smith, J. R., 1913. *Industrial and Commercial Geography*. New York: Henry Holt & Co..
- Sparks, K., 2007. Alfred DuPont Chandler, Jr.. In: T. E. o. E. Britannica, ed. *Britannica Book of the Year*. London: Encyclopaedia Britannica (UK) Ltd.
- Spigel, B., 2015. The Relational Organization of Entrepreneurial Ecosystems. *Entrepreneurship Theory and Practice*, pp. 1-24.
- Spigel, B., 2016. Developing and governing entrepreneurial ecosystems: the structure of entrepreneurial support programs in Edinburgh, Scotland. *International Journal of Innovation and Regional Development*, 7(2), pp. 141-160.
- Stalk, G., 1988. Time - The Next Source of Competitive Advantage. *Harvard Business Review*, Volume July-August, pp. 41-51.
- Steinz, H. J., Rijnsoever, F. J. V. & Nauta, F., 2015. How to Green the red Dragon: A Start-up's Little Helper for Sustainable Development in China. *Business Strategy and the Environment*, Volume 25, pp. 593-608.
- Stewart, M., 2009. *The Management Myth*. 1 ed. New York: W. W. Norton & Company.
- Stiglitz, J., 2002. *Globalization and Its Discontents*. 1 ed. London: Allen Lane.
- Storper, M., 1995. The Resurgence of Regional Economies, Ten Years Later: The Region as a Nexus of Untraded Interdependencies.. *European Urban and Regional Studies*, 2(3), pp. 191-221.
- Storper, M., 1997. *The Regional World: Territorial Development in a Global Economy*. 1 ed. New York: The Guildford Press.
- Storper, M., 2013. *Keys to the City*. 1 ed. Princeton: Princeton University Press.

- Storper, M. & Scott, A. J., 2009. Rethinking human capital, creativity and urban growth. *Journal of Economic Geography*, Volume 9, pp. 147-167.
- Strategic Change, 2002, vol. 11. Obituary: Igor Ansoff, the father of strategic management. *Strategic Change*, Volume 11, pp. 437-438.
- Strauss-Kahn, V. & Vives, X., 2009. Why and where do headquarters move?. *Regional Science and Urban Economics*, Volume 39, pp. 168-186.
- Swyngedouw, E., 2000. The Marxian Alternative: Historical - Geographical Materialism and the Political Economy of Capitalism. In: *A Companion Guide to Economic Geography*. Oxford: Blackwell Publishers Ltd., pp. 41-59.
- Takala, J., Shylina, D. & Tilabi, S., 2014. How to Apply Sustainable Competitive Advantage for Regional Developments (Case: Ostrobothnia Region of Finland).. *Management and Production Engineering Review*, 5(2), pp. 66-77.
- Taylor, F. W., 1911. *Principles of Scientific Management (ebook)*. 1 ed. New York: Harper & Brothers.
- Thaler, R. H., 2000. From Homo Economicus to Homo Sapiens. *Journal of Economic Perspectives*, 14(1), pp. 133-141.
- Thaler, R. H., 2015. *Misbehaving: The Making of Behavioural Economics*. 1 ed. London: Allen Lane.
- The Economist, S., 2017. From great to good. *The Economist*, 6 May.
- TheCityUK, 2017. *UK-based financial and related professional services: Enabling Growth Across the UK*, London: TheCityUK.
- Thisse, J.-F. & Walliser, B., 1998. Is space a neglected topic in mainstream economics?. *Recherches Économiques de Louvain / Louvain Economic Review*, 64(1), pp. 11-22.
- Thünen, J. H. v., 1842. *Der isolirte Staat in Beziehung auf Landwirthschaft und Nationalökonomie*. 2 ed. Rostock: Leopold.
- Treacy, M. & Wiersema, F., 1993. Customer Intimacy and Other Value Disciplines. *Harvard Business Review*, 1(January - February), pp. 84-93.
- Treacy, M. & Wiersema, F., 1995. *The Discipline of Market Leaders*. 1 ed. London: Harper Collins.
- Turok, I., 2004. Cities, Regions and Competitiveness. *Regional Studies*, 38(9), pp. 1069-1083.
- Walker, O., 2018. Baillie Gifford picks Dublin to Brexit proof its business. *Financial Times*, 6 August, pp. on-line.
- Walther, O., Schulz, C. & Dörry, S., 2011. Specialised international financial centres and thier crisis resilience: The case of Luxembourg. *Geographische Zeitschrift*, 99(2/3), pp. 123-142.
- Weber, A., 1929. *Theory of the Location of Industries*. 1 ed. Chicago: University of Chicago Press.

- Weiss, R. S., 1995. *Learning from Strangers: The Art and Method of Qualitative Interview Studies*. 1 ed. New York: The Free Press (Simon & Schuster).
- Welch, J. & Welch, S., 2005. *Winning*. 1 ed. New York: Harper Collins.
- Wernerfelt, B., 1984. A Resource-Based View of the Firm. *Strategic Management Journal*, 5(2), pp. 171-180.
- Whittington, R., 1993. *What is strategy, and does it matter*. 1 ed. London: Routledge.
- Whittington, R., Cailluet, L. & Yakis-Douglas, B., 2011. Opening Strategy: Evolution of a Precarious Profession. *British Journal of Management*, Volume 22, pp. 531-544.
- World Bank, 2017. *Data GDP (constant 2010 US\$)*. [Online]
Available at:
<https://data.worldbank.org/indicator/NY.GDP.MKTP.KD?end=2016&start=1961&view=chart>
[Accessed 17 October 2017].
- World Bank, 2017. *Gross Domestic Product 2016*. [Online]
Available at: <http://databank.worldbank.org/data/download/GDP.pdf>
[Accessed 17 October 2017].
- World Bank, 2018. *DataBank*. [Online]
Available at: <http://databank.worldbank.org/data/>
[Accessed 6 February 2016].
- Wrege, C. D. & Perroni, A. G., 1974. Taylor's Pig-Tale: A Historical Analysis of Frederick W. Taylor's Pig-Iron Experiments. *The Academy of Management Journal*, 17(1), pp. 6-27.
- Wrege, C. D. & Stotka, A. M., 1978. Cooke Creates a Classic: The Story behind F. W. Taylor's Principles of Scientific Management. *The Academy of Management Review*, 3(4), pp. 736-749.
- Yetton, P., Craig, J., Davis, J. & Hilmer, F., 1992. Are diamonds a country's best friend?: A critique of Porter's theory of national competition as applied to Canada, New Zealand and Australia. *Australian Journal of Management*, 17(1), pp. 89-119.
- You, J.-i. & Wilkinson, F., 1994. Competition and co-operation: toward understanding industrial districts. *Review of Political Economy*, 6(3), pp. 259-278.
- Zeitlin, J. & Herrigel, G., 2000. *Americanization and its Limits: Reworking US Technology and Management in Post-War Europe and Japan*. 1 ed. New York: Oxford University Press.

Appendix 1 Example Organisational Profile

Type	Investment Management
Parent	-
Address	Calton Square, 1 Greenside Row, Edinburgh EH1 3AN
Nature of Presence	HQ
Founded	1908 (Always independent) WS 1907
Employees	928 (213 investment professionals; 41 partners)
Contact	
Memberships	SFE

Figures

Figures					
	£mln	£mln	£mln		
		Profit	Assets		
Year	Turnover	(pre tax)	under mgt.	Source	
			130,000	Baillie Gifford	

History

Baillie & Gifford WS was formed in 1907 as a partnership between Colonel Augustus Baillie and Carlyle Gifford. Initially, it was a law firm but the financial climate of the time led to the business switching its emphasis to investment in 1908. In 1909, Baillie & Gifford created the Straits Mortgage and Trust Company Limited to lend money to rubber planters in Malaya.

The Straits Mortgage and Trust Company Limited was renamed The Scottish Mortgage and Trust Limited in 1913, and this was followed by the introduction of several other investment trusts. Baillie Gifford's clients and staff emerged relatively unscathed from the First World War, and the 'Roaring Twenties' gave Gifford many opportunities to expand the firm's investment business. By 1927, the transition of Baillie & Gifford WS from a firm of solicitors conducting institutional investment business to a partnership managing investment trusts was completed with the creation of Baillie Gifford & Co. The firm continued to grow steadily until the outbreak of the Second World War.

Baillie died in 1939 and, the following year, Gifford was posted to New York on UK Government business. However, the firm survived the war and the troubled investment climate which followed. After a period of strong growth in the firm's staff and client base, Gifford retired in 1965 at the age of 84. Baillie Gifford emerged from a further period of economic weakness in the UK during the 1970s with its position enhanced by growth in the amount of money it managed on behalf of clients.

Assets under management continued to grow strongly during the 1990s. The firm altered the management structure when it reverted to having joint senior partners. And, as the new millennium approached, another huge change occurred with the increased use of technology – a necessary evolution as the business expanded and the client base became increasingly complex.

By the time of its centenary in 2008, Baillie Gifford had offices in New York and London in addition to its headquarters in Edinburgh, and was managing more than £50 billion. Clients included five of the seven largest pension funds in the US and the firm had also attracted significant levels of business from Japan and Australia, as well as continuing to make inroads in other parts of the Far and Middle East.

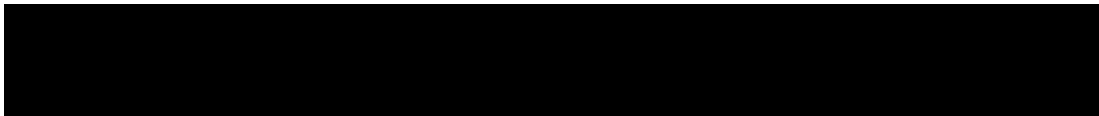
Strategy

Baillie Gifford is one of the UK's leading privately-owned investment management companies. The firm is truly global, however, managing assets for UK and international clients in both institutional and retail markets.

What makes us different is that we put our clients' interests above all else. We are able to do this because:

- We are an independent partnership and therefore we do not have the distraction of outside shareholders
- Investment management is our only business.

Contacts: Background



Web Site Content

Web site: <https://www.bailliegifford.com>

Independent active management firm. Funds under management, September 2015 : £110bn. 40 partners. One approach = active investing and bottom-up conviction portfolio construction. 896 employees, of which 215 investment professionals. No mergers or acquisitions in history. Commitment to remaining independent. 9 of clients in top 20 largest global pension funds.

Sponsoring curiosity, insight and imagination. 5 year deal for 2015. UK premier prize for non-fiction. Renamed the Baillie Gifford Prize for non-fiction. The prize aims to recognise and reward the very best in high quality non-fiction and is open to books in the areas of current affairs, history, politics, science, sport, travel, biography, autobiography and the arts. Authors of any nationality, whose work is published in the UK in English in any given year, are eligible.

Charity of the Year

Small local charity nominated each year where BG can make a difference. 2015/16 = *Contact the Elderly*.

Recent News

Book 2007

[Edinburgh City of Funds](#) by Martin Fransman

Articles	Citywire Money by Katharine Dixon on Aug 02, 2006 Baillie Gifford picks Dublin to Brexit proof its business by Owen Walker, FT on August 06, 2018
----------	---

Appendix 2 Interview Framework Skeleton

What are your key strategies?

Product	Suppliers
Cost	Buyers
Service	New entrants
	Substitution
	Rivalry

Has being in Edinburgh helped especially in any way?

Soft - city	Soft - business	Hard - city	Firm - hard
Heritage (Enlightenment)	Cluster effects	Infrastructure	Factor conditions
Education	Tacit knowledge/ Knowledge transfer	City gvt.	Local market
Reputation	Co-operation	Regulatory regime	Related and supporting cos.
Quality of life	Competition	Cost of living	Firm strategy
	Spin-out/inertia		

The Future

Reputational damage	Fintech
Drift to London	New segments
Independence/Brexit	

Appendix 3 NVivo Node Hierarchy

The PFR Today (5 themes)		
Level 1 (5 nodes)	Level 2 (24 nodes)	Level 3 (11 nodes)
Ease of doing Business	Political environment	Policy and regulation Incentives and support
	Infrastructure	Transport Connectivity Offices and office services
	Support services	
	Market access	
Talent	Cost	
	Critical mass and talent pool	
	Education	Schools FE and other training Universities
	Free movement of labour	
	Quality	Motivation, culture, general Flexibility and adaptability Professional and technical skills
	Staff turnover	
Quality of life	Affinity	
	Cost of living	
	City character and culture	
	City size, accessibility and facilities	
	Families and recreation	

Local networks	Business support organisations
	Co-operation and knowledge exchange
	Local impact
	Rivalry
Legacy	Capital
	Critical mass and incumbency
	Education and experience
	Institutions and professional services
	Reputation and culture